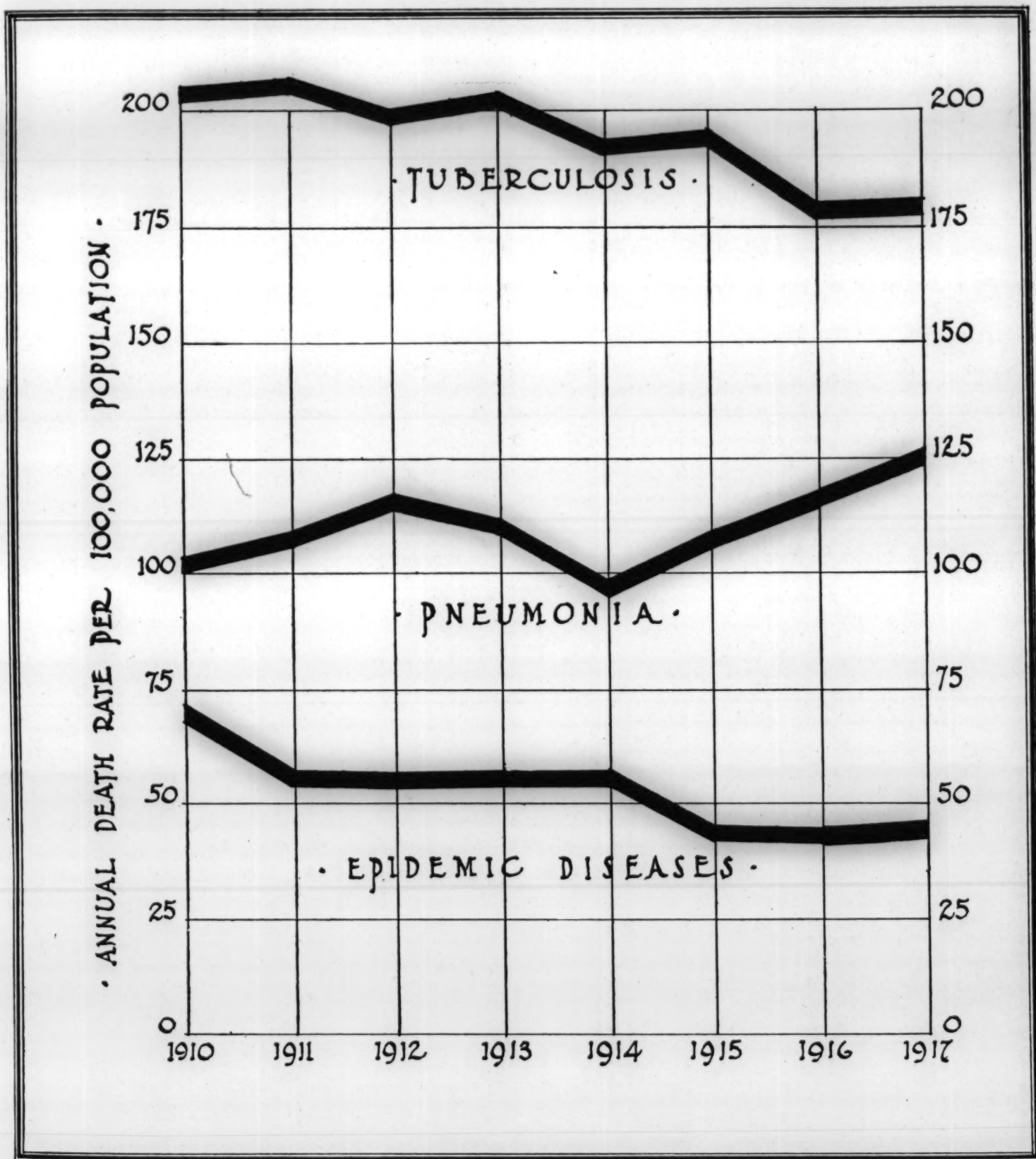


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A. S. BURLESON, Postmaster General.

CALIFORNIA STATE BOARD OF HEALTH MONTHLY BULLETIN



The reductions in the death rates for tuberculosis and the epidemic diseases in California have been remarkable, especially during recent years. In 1906, the death rate for typhoid fever and diphtheria together, equalled the 1917 death rates for all epidemic diseases combined, viz.: typhoid fever, malaria, smallpox, measles, scarlet fever, whooping cough, diphtheria, influenza, plague, dysentery, erysipelas and all other epidemic diseases. The tuberculosis death rate, since 1906, has been reduced by more than one-fifth. The pneumonia death rate continues to rise, but there is hope that the prevalence of this communicable disease may soon be reduced greatly.

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CALIFORNIA STATE BOARD OF HEALTH

MONTHLY BULLETIN

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MONTHLY BULLETIN

CALIFORNIA STATE BOARD OF HEALTH

Devoted to the Prevention of Sickness and Death

Q Entered as second-class matter, August 15, 1905, at the post office at Sacramento, California, under the Act of Congress of July 16, 1894.

Sent free, on request, to any citizen of California.

WILFRED H. KELLOGG, M.D., Secretary and Executive Officer . Editor
GUY P. JONES, Morbidity Statistician . . . Associate Editor

Dr. Peers on Way to France.

Dr. Robert A. Peers of Colfax, member of the California State Board of Health, offered his services to the government, asking that he be placed with the tuberculosis branch of the American Red Cross, and that he be assigned to tuberculosis control work in France. His services were accepted and he was notified to appear in New York April 1. Dr. Peers has had the experience of many years in tuberculosis work, not only in the treatment of the disease but also in the control of tuberculosis as a public health problem. His common sense and his broad point of view has enabled him to become an important factor in this work in California. It is with pride that the board speeds Dr. Peers to France to give his valuable services to our courageous allies "over there."

★ ★ ★

Hanford Health Board Takes Determined Stand.

The Hanford City Board of Health has made an open declaration that it will prosecute at all future times all cases of neglect to report cases of quarantinable diseases, regardless of whether the offender may be a physician who may be responsible for the evasion or violation of the law, or whether he may be a layman who so neglects to comply with the law. The board states that the health and lives of the children of the city are of too great importance to be jeopardized through neglect to report cases of communicable diseases. "Ignorance on the part of parents is not a valid excuse," is the statement made in the Hanford Journal, "for if a child has the symptoms of any of the diseases that have been so prevalent here during the winter, it is their duty to the child to call a physician. But whether it is the parents or a physician who disregard the law in the matter, prosecution of the next case or two of this kind that comes up will put a stop to the practice, which is largely responsible for the large number of cases that have prevailed during the winter."

**Health Record More
Than Mere Bookkeeping.**

Simply maintaining an efficient bookkeeping department does not make a successful business nor does the mere keeping of accurate records of births and deaths make a successful health department. This does not belittle the importance of either bookkeeping or the recording of vital statistics, but it means that neither a successful business record nor a successful health record depends wholly upon statistics. Some newspapers in California are disposed to base claims for the health records of their cities or counties only upon the numbers of births and deaths registered each month. They overlook the dairy scores, the sanitation of food-producing establishments, the control of communicable diseases and the many other factors that have to do with making a successful health department. A low death rate and a high birth rate are much to be desired and they are finally achieved by means of factors such as these mentioned, but the record of any health department should be based upon its activities for securing these desirable records rather than upon the records themselves or the accuracy with which they are kept.

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**A New Plan for
Saving Pork Fat.**

It is stated by Dr. Douglas W. Montgomery of San Francisco that there are about forty thousand druggists in the United States, each of whom uses, at a low average, twenty-five pounds of lard annually, a total of one million pounds. Most of this lard is used in the manufacture of zinc ointment, which is of common use throughout the United States. Dr. Montgomery suggests that most of this pork fat might be released for use as a food if physicians would substitute petroleum products in place of lard in writing their prescriptions. He also suggests that druggists in manufacturing zinc ointment for their customers, where no physician's prescription is used, employ petroleum products rather than lard. Pork fat is without doubt one of the most necessary items in the soldiers' rations, and anything that may be done to conserve this valuable food product should be undertaken at once. Dr. Montgomery suggests further that equal parts of lanolin and vaseline make an excellent substitute, which is in many ways superior to lard, as there is no question of its decomposing and neither of the ingredients are of the slightest use as food—and food has become the central necessity in this great war.

★ ★ ★

**Venereal Diseases
Reported in 1917.**

Nearly three times as many cases of gonococcus infection were reported in California during 1917 as during the preceding year. The total was 2,873 cases in 1917 against 1,091 cases during 1916. The increase in the number of cases of syphilis reported was not so marked, 1,790 cases being reported during 1917 against 1,538 cases reported during 1916. The reports of these cases of venereal disease were received from forty-five out of the 58 counties of California. The only counties not reporting cases of these diseases are those of very low population in the Sierra Nevadas and other mountainous districts of the state. Nearly all of the large cities reported their cases of venereal diseases regularly at the end of each week. It would appear that the old barriers of false modesty regarding the reporting of these cases are gradually being broken down and the venereal diseases are now being placed upon the same plane as any other of the reportable communicable diseases.

Ferndale Adopts Physical Inspection. Ferndale, in Humboldt County, is one of the progressive smaller cities of California that has established physical inspection in its public schools. At a meeting of school teachers and trustees recently held in Ferndale, it was decided to try physical inspection for the rest of the school year. If it proves as beneficial as expected, the trustees will engage an examiner for next year. Physicians in Ferndale have volunteered to start the work and will alternate in the examination of school children. The Ferndale Enterprise in commenting upon the innovation says:

"General health conditions will be looked into and special cases examined, and the teachers will be at liberty to send sick children to the doctor for diagnosis. Children pronounced ill will be sent home until recovered. In this way it is hoped epidemics may be prevented.

"Trustees and teachers are strongly in favor of inspection and it is hoped it will be adopted for next year. A thorough examination of every child in school is essential. Adenoids, defective teeth, eyesight or hearing may retard the pupil and injure his health permanently. The War Department has found a large percentage of the men called for service unfit, because of lack of attention to health during the school years.

"Supervision of the health of school children is being started in all parts of the country under the direction of the state and national councils of defense, as a war measure to raise the physical standard of the nation."

★ ★ ★

To Select Site for National Leprosarium.

Surgeon General Rupert Blue of the United States Public Health Service has announced the appointment of a committee to select a site for the National Leprosarium, provision for which was recently made by Congress. This committee is composed of Surgeon G. W. McCoy, director of the Hygienic Laboratory of the United States Public Health Service; Dr. W. C. Woodward, Health Officer of the District of Columbia, and Dr. C. V. Chapin of Providence, R. I. Each of these men has had experience in the control of leprosy as a public health problem, and it is hoped that they may be able to formulate, at an early date, definite plans for the establishment of this much-needed institution.

★ ★ ★

Riverside Demands Sanitary Inspector.

The City Board of Health of Riverside is endeavoring to secure the appointment of a full-time dairy and sanitary inspector. Attention has been called to the fact that Riverside is spending but one-half of one per cent for the maintenance of public health, while the average provision for cities of the same size as Riverside is 5 per cent of the total tax revenue. Because of the establishment of a government aviation school, it is necessary that sanitary conditions in all food-producing establishments of the vicinity be of the highest order. The sanitary conditions in the vicinity of all training camps must be near perfect, in order that the men in training may run no risk of illness.

Condemns Sewage for Irrigating Vegetables.

In the interest of public health the California State Board of Health has condemned the use of sewage or sewage-polluted water for irrigating garden vegetables, and it has also condemned the sale or consumption of vegetables so irrigated. The text of the board's resolution is as follows:

"Resolved, That sewage or sewage-polluted water shall not be used for irrigating vegetables, berries or low-growing fruits intended to be used for human consumption; be it further

"Resolved, That sewage or sewage-polluted water may be used for irrigating vegetables or grains which are harvested in the dry state, such as beans, or vegetables, grains or alfalfa used exclusively as food for stock, or trees bearing fruits or nuts, with the exception that dairy cattle shall not be pastured on land under irrigation by sewage."

It is much better that sewage should be used for promoting the growth of stock foods, fodder and crops harvested in the dry state, such as beans, alfalfa, seed corn, etc., rather than to take any risk of infection with typhoid or other diseases through the use of green vegetables or foods that have been irrigated with sewage. If any agriculturist is in doubt regarding the application of this resolution to his crop plans, he should take up the matter with the Director of the Bureau of Sanitary Engineering, Berkeley.

★ ★ ★

What the State Does to Prevent Blindness.

Since November, 1915, the California State Board of Health has purchased 22,000 ophthalmia neonatorum prophylactic outfits, of which number 16,000 have been distributed, free of cost, to physicians and midwives throughout the state. The wax ampoule, containing the prophylactic, is easily used, without danger of injury to the infant's eyes and it appeals strongly to physicians and midwives because of its convenient form. Through the free distribution of this product, no doubt many cases of blindness have been prevented and the small cost of the prophylactic is well worth the expenditure. No risk of incurring blindness can be permitted; it is too great a calamity to both the individual and the state.

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A Tuberculosis Exhibit for Our Soldiers.

The Bureau of Tuberculosis has had an exhibit prepared for the benefit of the men at Camp Kearny and Camp Fremont. The exhibit consists of twelve cartoons, drawn by A. V. Buel, of the Sacramento Bee. They picture the fallacy of using patent medicines for the treatment of tuberculosis and show vividly the advantages to be derived from rational care in an institution.

THE PRESENT STATUS OF TYPHOID FEVER.

The typhoid fever death rate in California rose very slightly during 1917, the rate per 100,000 population for last year being 7.4, and the rate for 1916 being 7.1 per 100,000 population. The increase in the rate is in about the same proportion as the increase in the general death rate for the state, which was 13.8 per 1,000 for 1917 and 13.5 per 1,000 for 1916. The rise in the typhoid rate is so slight that it has little bearing upon the typhoid control problems in the various counties of California, however.

There were 1,431 cases of typhoid reported to the California State Board of Health during 1917—231 more cases than were reported during the preceding year. The fact that more cases of typhoid were reported is most commendable, indicating that physicians and health officers throughout the state have been more faithful in complying with the requirements of the law.

Typhoid Fever in California—Cases and Deaths by Months for the Years 1915, 1916 and 1917.

	1915		1916		1917	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
January -----	69	15	55	11	134	28
February -----	83	27	48	13	57	9
March -----	90	18	68	16	61	15
April -----	52	24	58	14	53	8
May -----	90	16	122	16	74	10
June -----	76	20	141	21	93	19
July -----	125	17	132	24	155	25
August -----	131	36	163	16	228	27
September -----	149	29	131	28	176	24
October -----	104	29	85	19	198	21
November -----	80	21	91	13	95	22
December -----	77	24	97	16	109	12
Totals -----	1,126	276	1,191	207	1,431	225

Rates for State Health Districts.

A comparison of the case rates and death rates per 100,000 population for the various state health districts reveals the interesting information that the typhoid death rate for the North Coast District and that for the Central Coast District, as well as that for the Southern District, were all lowered during the past year. The highest typhoid death rate for any of the state health districts is that for the Central District,

comprising the San Joaquin Valley. The following table gives the data for typhoid fever in state health districts during 1916 and 1917:

Typhoid Fever in California by State Health Districts, 1916 and 1917—Numbers of Cases and Deaths With Case Rates and Death Rates Per 100,000 Population.

	Cases		Deaths		Per 100,000 population			
	1916	1917	1916	1917	Case rate		Death rate	
					1916	1917	1916	1917
North coast -----	55	62	8	6	25.9	28.2	3.8	2.8
Northern -----	159	184	27	30	55.7	63.4	9.5	10.3
Central Coast -----	375	398	57	45	36.0	37.2	5.5	4.2
Central -----	213	223	34	51	67.0	68.2	10.7	15.6
South Coast -----	412	408	49	63	46.1	43.7	5.5	6.7
Southern -----	169	156	33	30	84.6	75.1	16.5	14.4
The State -----	1,383	1,431	208	225	46.9	47.1	7.1	7.4
San Francisco -----	189	193	16	23	40.8	41.0	3.5	5.1
Los Angeles -----	211	213	14	30	41.9	40.0	2.8	5.6

The rates for San Francisco and Los Angeles are also included in this table. It should be remembered, however, that fully 50 per cent of the typhoid cases reported in these cities are brought into them from the interior parts of the state, in order that advantage may be taken of the hospitals in the large cities.

If the measures now employed in typhoid fever control are continued and if the people of the state render the same cooperation that they have given during the past two years, the board believes that the typhoid fever death rate for California may be brought to a much lower point during 1918. These measures are the same that have been employed during the past few years.

- (1) The prevention of the sewage pollution of public and private water supplies;
- (2) The insurance of safe milk supplies through the pasteurization and inspection provisions of the state milk law;
- (3) Investigation of outbreaks of typhoid fever, determining and removing their sources;
- (4) Manufacture and free distribution to physicians of typhoid vaccine;
- (5) Inspection of hotels, eating places, summer resorts and surroundings, correcting insanitary conditions that may be present;
- (6) Enforcement of laws and of the board's regulations for the prevention of typhoid fever;
- (7) By education in the prevention of typhoid fever.

In considering the typhoid fever death rate in California, it should be remembered that in 1913 the death rate was 16.3 per 100,000 population and that in these few years this rate has been cut in two. This fact indicates that the methods now being employed for the control of the disease are thoroughly adequate. The most necessary factor in lowering this rate still further lies in public-spirited cooperation in the enforcement of these measures of control.

The typhoid death rates per 100,000 population for each year during the period 1906-17 are as follows:

1906	-----	32.3	1912	-----	17.6
1907	-----	26.3	1913	-----	16.3
1908	-----	24.4	1914	-----	13.6
1909	-----	20.0	1915	-----	9.7
1910	-----	19.9	1916	-----	7.1
1911	-----	17.8	1917	-----	7.4

ODE TO THE ANKYLOSTOMA DUODENALE

By J. LIFTCHILD, M.D., Shawmut, Cal.

Lo, the poor Hookworm! whose untutored mind
Intestinal canals essays to find;
Of whose evolvings savants show the mode,
From egg to larva, then to nematode.
Its soul proud science never sought to stray
Far as the solar walk, in slime it lay;
Trusting that fate would soon the favor grant
To reach the genus homo's sewage plant.
Once through a pore or down the fauces passed,
Its homing instinct finds the goal, at last;
And staking out a claim inside the lumen
Of ileum or convolute jejunum,
It yields to Cupid's dart, seeks out its mate,
And joyfully proceeds to propagate.
There, safely clinging to sustaining villi,
It feasts and fattens, hoping willy-nilly,
That no dread oil of chenopodium,
Whose presence fills its breast with odium,
Will be ingested by its long-suffering host
And straightway force him to give up the ghost;
And later, fixed to microscopic slide,
Be rubbered at in posture as he died.

MOSQUITO ABATEMENT DISTRICTS IN CALIFORNIA.

By STANLEY B. FREEBORN, M. S., Acting Consulting Parasitologist, California State Board of Health.

The first organized campaign against mosquitoes in California was undertaken at San Rafael, Marin County, in 1903. The problem here was almost entirely directed against salt marsh species. In 1904 and 1905 Professor H. J. Quayle of the University of California, directed an extensive drainage and oiling campaign against mosquitoes in San Mateo County, following the application of a number of residents to the University of California for assistance. No new developments in mosquito control arose until 1909 when two malaria ridden communities in the Sierra foothill—Penryn and Oroville—called upon the University for assistance, with the result that Professor W. B. Herms in these places, directed the first antimalaria campaigns in California. The results in these two places were so satisfactory that various communities up and down the great central valleys were stirred to similar efforts. Most of these attempts were poorly financed and nearly all of them rested on the donations of a few public-spirited men who soon grew tired, however, of bearing the entire expense, while those equally able to subscribe grumbled at lack of results. In other cases, the campaigns were purely dependent on the temporary enthusiasm of a few people who shortly lost their interest when a new project appeared in the community.

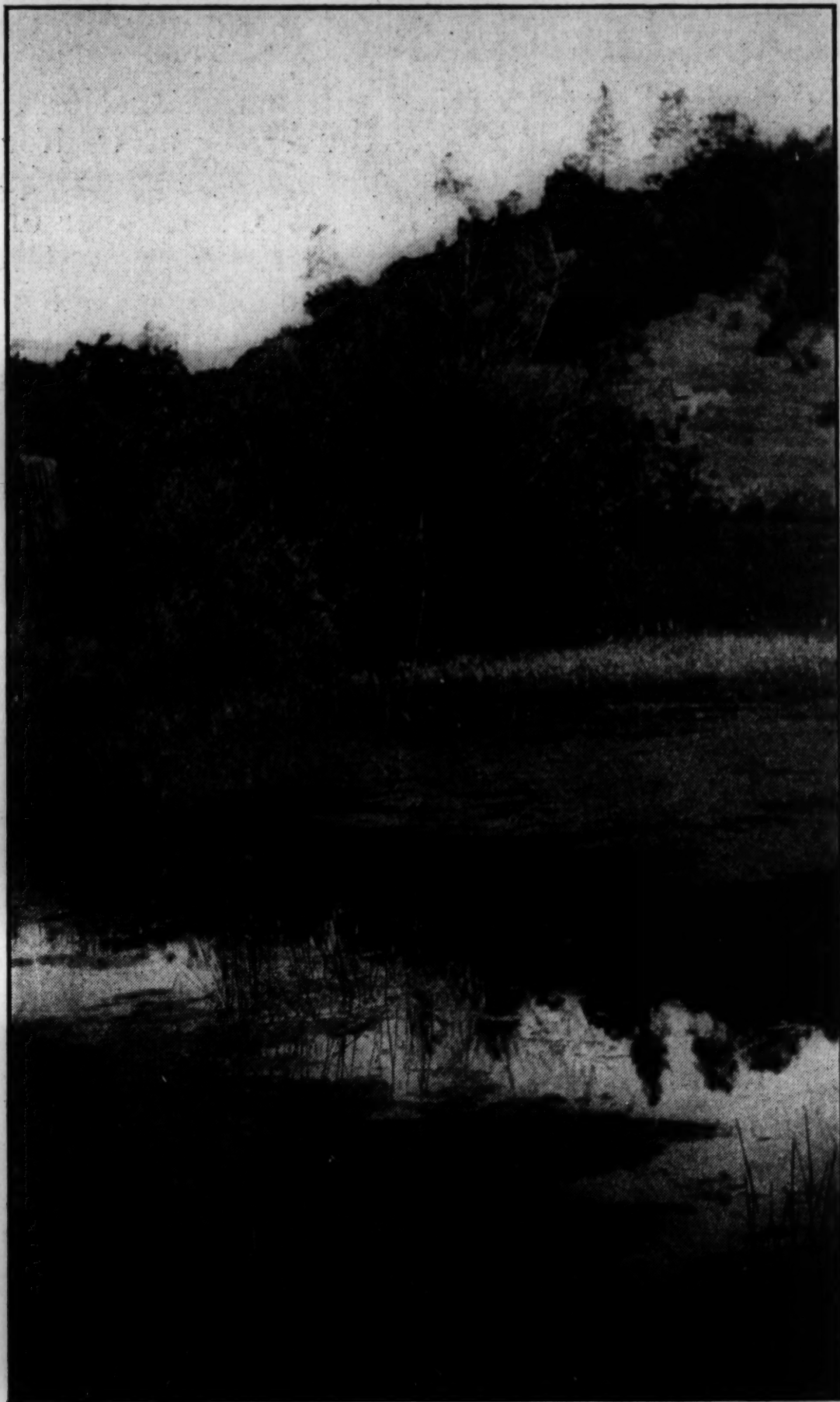
With these defects in mind, the adoption of the Mosquito Abatement Districts Bill was a decided step in advance, for it guaranteed an equal distribution of subscriptions by all persons benefited (at least financially) and also insured a definite budget that might be carefully planned and expended.

San Rafael First.

San Rafael, the pioneer antimosquito community in 1903, again took the credit for organizing first under the provisions of the Mosquito Abatement District Act. This district, known as the Marin County No. 1 Mosquito Abatement District, has been in constant operation since its start in 1915. The operations here are largely directed against salt marsh mosquitoes and extremely satisfactory results have been accomplished. On December 15, 1915, the Three Cities Mosquito Abatement District was formed, including San Mateo, Burlingame and Hillsborough. This district faced the same conditions that were found at San Rafael and work there has been equally successful.

In 1916 three more districts were organized—the Pulgas district, surrounding Redwood City, the Dr. Morris district, including forty-eight square miles, with Bakersfield in the approximate center, and the Oroville and Thermalito district, including these two cities. In the last two mentioned districts the work is strictly antimalarial. The Bakersfield or Dr. Morris district, although organized in 1916, did not start actual work until December, 1917. They have one of the best organizations and promise to show extraordinary results during the coming year. The Oroville district was formed primarily to put the work started in 1910 on a business basis and to insure equal distribution of the cost. The Oroville people were well acquainted with the value of

mosquito control for it has been practiced continually since its start in 1910 and the results have been extremely gratifying to every one concerned. Physicians and druggists are unanimous in the opinion that the incidence of malaria has been decidedly reduced, and housekeepers



Quiet, shallow pools of standing water are ideal breeding places for mosquitoes. The superintendent of a mosquito abatement district would not tolerate conditions such as these. He would drain this pool, if possible, and if that could not be accomplished, he would oil the surface to prevent the breeding of these tormenting and dangerous insects.

give unsolicited information regarding the scarcity of the erstwhile omnipresent mosquito.

Cooperation in Los Molinos.

In 1917 the Los Molinos district surrounding the colony of Los Molinos in Tehama County, the Southern Sonoma district near Glen Ellen, the Matadero district, with Palo Alto as its center, and the

Fairoaks district in Sacramento County, were formed. All four of these districts have anopheline mosquitoes within their boundaries but only the Los Molinos and Fairoaks districts are avowedly anti-malarial projects. In a recent letter regarding the Los Molinos district Mr. Ruby, the superintendent, says that it is the concurrence of opinion that cases of malarial fever have been decreased by 75 per cent as a result of the district's work. They were exceedingly fortunate in this district to have a remarkable degree of cooperation among the residents and the donation of a great deal of time and work on the part of the individual land owners. The Southern Sonoma district, although the work is largely directed against malarial mosquitoes, was undoubtedly undertaken as a financial investment on the part of owners that conduct hotels and resorts in the district.

Matadero District Important.

The Matadero district at Palo Alto is primarily directed against salt marsh mosquitoes although anophelines occur throughout the western part of the district. The district was organized too late to get a budget before the supervisors of the county for the levy of a tax for this year's work. It is rather important that this district should be in working order this year as it undoubtedly contributes enormous supplies of mosquitoes to Camp Fremont and makes the work of the Pulgas district (Redwood City), which it adjoins, doubly difficult.

The Fairoaks district is very small. The mosquitoes are largely anophelines and the district is organized for antimalarial work. The tax, although small, covers the district well enough to insure sufficient temporary control and a small amount of permanent work each year.

Nine Districts Organized.

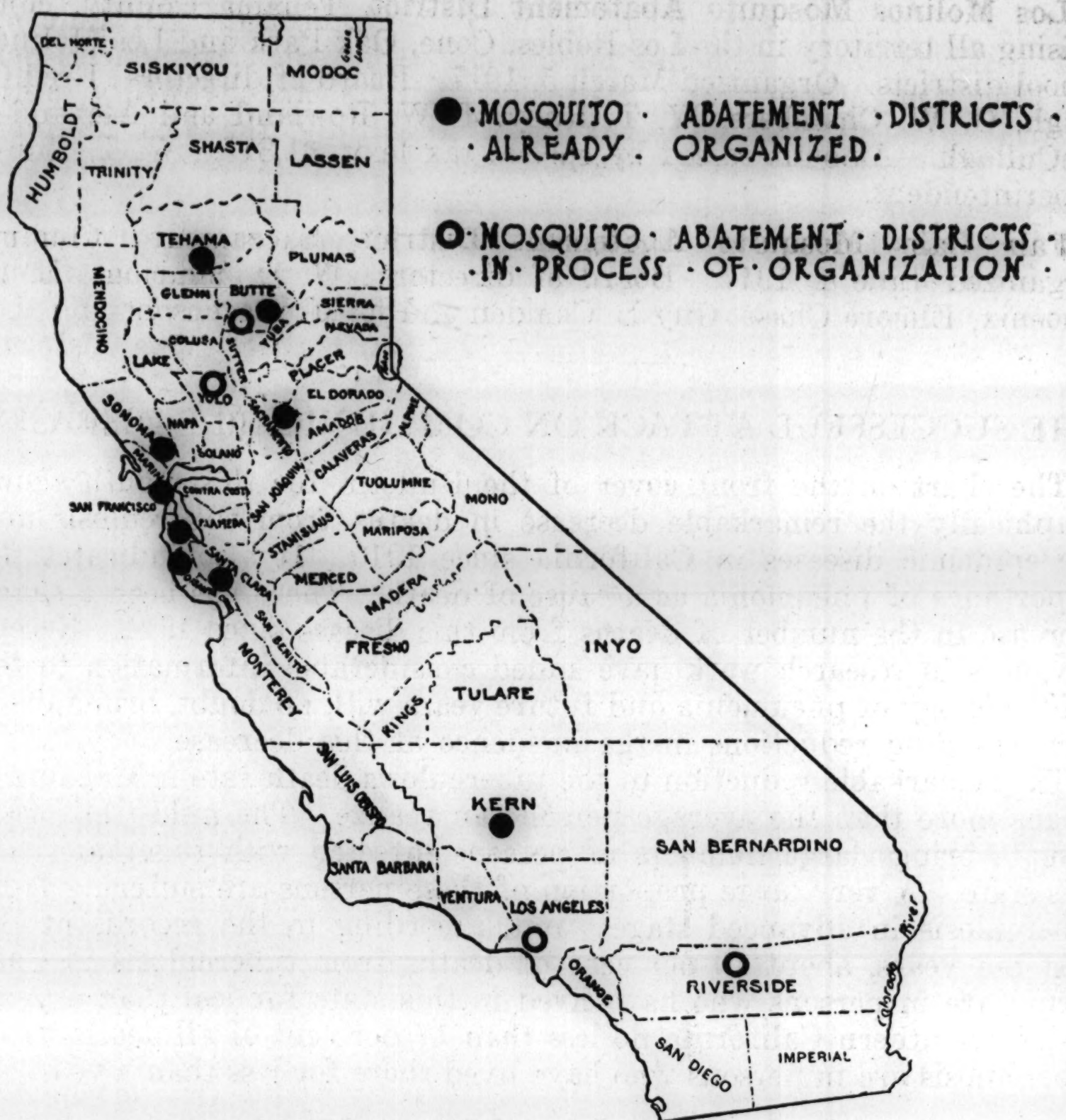
Following is a list of the mosquito abatement districts now organized in California:

Oroville Mosquito Abatement District, Butte County, comprising the city of Oroville, and Thermalito, a colony across the Feather River from Oroville. Organized August 16, 1916. Board of directors: C. H. Thurman, president; E. B. Ward, C. G. Leeson, G. C. Mansfield, H. C. Courtley and S. E. Rowe. C. G. Crowe, superintendent.

Dr. Morris Mosquito Abatement District, Kern County, comprising the city of Bakersfield and vicinity. Organized July 18, 1916. Board of directors: C. A. Hare, James Curran and H. W. Thomas. Amount raised by special tax levy, \$13,893.09. H. E. Woodworth, superintendent.

Marin County Mosquito Abatement District, comprising the city of Sausalito to San Antonio Creek. Organized November 3, 1915. Board of directors: W. H. Freeland, president; E. G. Coughlin, Will Falley, A. F. Roberts, J. W. Mailliard, Jr., John C. Kittle, Wallace Foster and O. W. Jones, secretary. Amount raised by special tax levy, \$8,625.32. N. M. Stover, superintendent.

Three-Cities Mosquito Abatement District, San Mateo County, comprising the cities of San Mateo, Burlingame and Hillsborough. Organized December 20, 1915. Board of directors: J. C. Robb, W. J.



Eva, William Waters, Norris K. Davis and Porter E. Lamb. Amount raised by special tax levy, \$13,300. Noble M. Stover, superintendent.

Pulgas Mosquito Abatement District, San Mateo County, comprising the city of Redwood City and unincorporated territory of Menlo Park, Belmont, San Carlos and Woodside. Organized June 19, 1916. Board of directors: A. G. C. Hahn, W. J. Murray and L. A. Barrett. Amount raised by special tax levy, \$9,500. T. L. Murray, superintendent.

Matadero Mosquito Abatement District, Santa Clara County. Organized August 8, 1917. Board of directors: W. F. Hyde, George O. Wilson and Joseph H. Borden.

Southern Sonoma Mosquito Abatement District, Sonoma County, comprising the city of Glen Ellen to county line below Sonoma. Organized April 13, 1917. Board of directors: Dr. A. M. Thompson, James and Thomas Baines, James A. Ryan and R. P. Hill. Amount raised by taxation, \$580.

Los Molinos Mosquito Abatement District, Tehama County, comprising all territory in the Los Robles, Cone, Oak Park and Los Molinos school districts. Organized March 5, 1917. Board of directors: Fred C. Pugh, O. W. Chambers, W. T. Ruby, J. W. Rowland and Alexander McCullagh. Amount raised by special tax levy, \$1,317. W. T. Ruby, superintendent.

Fair Oaks Mosquito Abatement District, Sacramento County. Organized June 4, 1917. Board of directors: W. D. Simmons, E. C. Phoenix, Elmore Chase, Guy L. Camden and R. M. Stevenson.

THE SUCCESSFUL ATTACK ON COMMUNICABLE DISEASES.

The chart on the front cover of the Bulletin for this month shows graphically the remarkable decrease in deaths from tuberculosis and the epidemic diseases in California since 1910. It also indicates the importance of pneumonia as a cause of death. There has been a sharp increase in the number of deaths from this disease since 1914. Recent advances in research work have added considerable information to the epidemiology of pneumonia and future years will, no doubt, bring about corresponding reductions in the incidence of this decrease.

The remarkable reduction in the tuberculosis death rate in California means more than the average person can realize. The mild California climate brings large numbers of persons infected with tuberculosis to this state. A very large proportion of these persons are suffering from tuberculosis in advanced stages, and, according to the records of the past ten years, about 10 per cent of deaths from tuberculosis in California are in persons who have lived in this state for less than a year, and for southern California no less than 17 per cent of all deaths from tuberculosis are in persons who have lived there for less than a year.

Lower Rate in Spite of Imported Cases.

In spite of this problem of imported cases the tuberculosis death rate in California has been materially lowered. When it is considered that in 1910 the death rate for tuberculosis was 203.3 per 100,000 population, while in 1917 it was but 179.4 per 100,000 population, it is seen that there is hope for reducing these rates still lower.

As for the epidemic diseases, including typhoid fever, malaria, small-pox, scarlet fever, whooping cough, diphtheria, and all other epidemic diseases, the reductions in the death rates for this group has been even more remarkable than the reduction in the tuberculosis death rate. In 1906 the typhoid fever death rate alone was 32.2 per 100,000 population, while the death rate for the entire group of epidemic diseases in 1917 was but 44 per 100,000 population.

These reductions have been brought about chiefly through the rigid supervision of cases of the epidemic diseases, by means of greater facilities provided for diagnosis, through the services of the Bureau of Communicable Diseases in making bacteriological examinations, through the enforcement of the board's regulations for the control of these diseases, through more thorough reporting of cases, and through the better spirit of cooperation in the work of control on the part of both physicians and laymen.

Rate May Be Made Lower.

If continued support is given to the work of the board in the suppression and control of these diseases the rates may be brought still lower and California may achieve a record of which many other states may well be envious.

ACTIVITIES IN MOSQUITO ERADICATION.

South Coast Cities Tired of Mosquitoes.

Considerable interest is being aroused in the harbor district of Los Angeles, as well as in Long Beach, relative to the eradication of mosquitoes. Los Angeles and Long Beach are planning the expenditure of \$10,000 for oiling large tracts of marsh land in the harbor district, Long Beach to appropriate \$3,000 of this sum. If a mosquito abatement district were formed in this community the troublesome mosquito would no doubt become as rare as it has become in the vicinities of San Mateo and San Rafael, where, before the establishment of mosquito abatement districts, the salt marsh mosquito was a perpetual nuisance.

An Attack on Kern County Mosquitoes.

The Dr. Morris Mosquito Abatement District of Kern County, under the superintendency of Mr. H. E. Woodworth, is now organized on a working basis, and under the efficient leadership of Mr. Woodworth a large amount of work in malaria control is being undertaken. A circular of information for citizens residing in the district, entitled "The Bakersfield Mosquito Campaign" has been prepared and very widely distributed throughout the district. Valuable information relative to the work of the district is given in this circular of information.

Oroville Plans 1918 Mosquito Campaign.

The Oroville Mosquito Abatement District has outlined its plan of campaign for 1918. C. H. Thurman of Thermalito has been selected as president of the board for the ensuing year. Field Agent C. G. Crowe plans to undertake considerable permanent drainage work. He has also requested the people of the Oroville district to give particular attention to removing empty tin cans and other receptacles that may contain standing water.

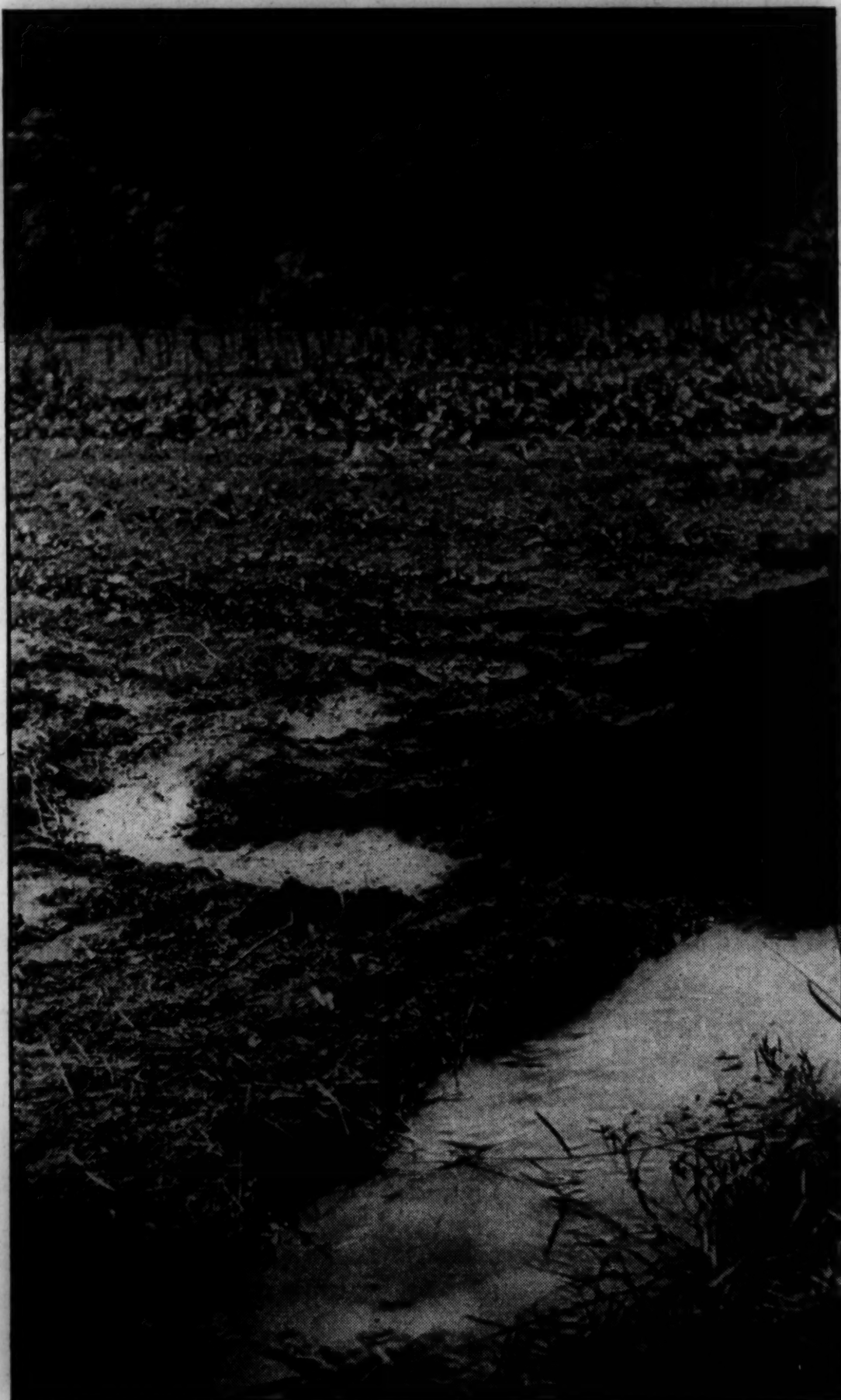
Redding Starts Fight on Malaria.

The Redding Free Press in its editorial columns calls upon the citizens of Redding to rally to the support of the city health officer in his campaign to eradicate mosquito breeding places. Attention is called to a city ordinance which makes it a misdemeanor for either property owner or renter to allow the accumulation of filthy stagnant water which may breed mosquitoes, or any other matter injurious to the public health to accumulate on any property. If the people of Redding and vicinity would take advantage of the provisions under the Mosquito Abatement District Act it would be possible to engage in continuous and active work there against the mosquitoes which are such a source of annoyance and danger in Redding and vicinity.

IRRIGATION WITH SEWAGE.

If sewage or sewage-polluted water is used for irrigation purposes, it should be used only for irrigating vegetables or grains that are harvested in the dry state, such as beans, or vegetables, grains or alfalfa used exclusively as food for stock, or trees bearing fruits or nuts. Dairy cattle, however, should not be pastured on land under irrigation by sewage.

The California State Board of Health passed a resolution at its March meeting, condemning the use of sewage or sewage-polluted water for irrigating vegetables, berries or low-growing fruits.



The practice of irrigating vegetables, berries, low-growing fruits, etc., with sewage or sewage-polluted water has been condemned by the California State Board of Health and the owners of the garden pictured above were obliged to discontinue the use of sewage-polluted water for irrigating vegetables. The world's food supply must be materially increased this year. Growing more vegetables will help to accomplish this, but it is not safe to risk typhoid and other infections through the use of this dangerous and unpleasant practice.

DISPOSAL OF GARBAGE BY HOG FEEDING.

"The Food Administration has done most wisely in urging the utilization of garbage by hog feeding. Greater value can be obtained from garbage in this way than in any other. The outlay for the plant is small as compared with reduction works and incinerators and depreciation is small. In fact, the land on which hogs are fed appreciates in value. Incineration is expensive and wasteful and is going out of favor. Reduction is more rational, but is not so economical as hog raising. Reduction is too expensive for small cities, but hog feeding can easily be undertaken by such.

The reason that hogs have not been used more for garbage disposal is because this has been so frowned on by health officials. Because the average hog farm smells bad the average health officer thought it must be a menace to health. Fortunately, the bugaboo of bad odors is fast disappearing. Of course, nuisances of this kind should be reduced to a minimum, but it is a question whether anything is gained by substituting a city garbage works for a country hog farm. It is also alleged that garbage-fed pork is of poor quality and carries disease, especially tuberculosis. The report of the recent conference on garbage feeding, called by the United States Food Administration, shows that such pork is equal in quality and value to corn-fed pork. As to infection with tuberculosis and trichinosis, it is of little moment, as meat is cooked before eating, but as a matter of fact there is no excess of these diseases in garbage-fed animals.

If health officers would encourage better methods, the nuisance from garbage feeding could be reduced to a permissible minimum and much money could be saved our cities which could be used for baby nurses and venereal clinics and so really save lives and prevent sickness. At the conference above mentioned agricultural officials and practical feeders discussed such matters as breeds, housing, methods of feeding, protection against disease by inoculation and otherwise and the prevention of nuisance. It is hoped that this is the beginning of an earnest scientific study of this problem."

DR. CHARLES V. CHAPIN,
Providence, R. I.

"To me, the tragedy of this earth is a diseased child. The natural inheritance of a child is joy and strength and growth and freedom. He is robbed of it all by disease. To me, the most tragic indictment of civilization is a diseased child—civilization that stands still and lets a little child through ignorance of his parent or teacher or for any cause, be robbed of this divine inheritance of the joy and happiness of childhood—of the strength and growth of childhood! Medical inspection is intended to prevent that tragedy—to help remove that terrible indictment against our Christian civilization. The physician and the teacher are necessarily the main agencies in this work. Medical inspection, then, opens a new door of larger service to childhood, and, through childhood, to civilization and posterity."—DR. J. Y. JOYNER, in address before State Medical Inspectors, Raleigh, October 11, 1917.

AMERICAN SOLDIER CLEAN.

In a report to the Secretary of War, General Pershing made the following statement:

"There has never been a similar body of men who have led as clean lives as our American soldiers in France. They have entered this war with the highest devotion to duty and with no other idea than to perform their duties in the most efficient manner possible. * * * Forbidden the use of strong drink and protected by stringent regulations against sexual evils, and supported by their own moral courage, their good behavior is the subject of most favorable comment especially by our allies."

This statement of the American commander in France was made necessary because of the indictment brought against our troops in France by a certain church board of temperance and morals. Of this indictment the New York Times of January 26 states:

"If the stories on which it was based were true, than our soldiers were without decency and our officers had lost their sense of responsibility. Officers were said to have given themselves up to orgies the day they landed in France, and the soldiers straightway plunged into vice that sapped their manhood and disgraced the army. It was said in this precious document of accusation that the United States was showing less regard for the welfare of its troops than the French government had shown for the safety of the laborers it sent to Tunis."

It is well that General Pershing has so emphatically cleared our men of these ugly charges. One of the misfortunes connected with the campaign against the venereal diseases that has been instituted during the past year lies in the opportunity that it has given to those of a morbid and fanatical turn of mind to besmirch the characters of the men who are sacrificing their lives that we in this country may live in peace and freedom.

In all of the organized work undertaken in the control of syphilis and gonorrhoea it has been proved conclusively that these diseases are more prevalent among the civilian population than the military population. Over in Germany official reports show that the venereal diseases are less prevalent near the firing line than in the barracks towns and villages outside of the zones of military operation. The venereal diseases are found among all classes of people, but they flourish chiefly among prostitutes. The plan of control now in operation throughout many states is without doubt the most effective method that has yet been adopted.

If, in the future, any one in America is disposed to indict any class of people because of venereal disease, let him attach the civilian population whose members are largely responsible for the spread of the venereal diseases. Let no one dare to make any such accusations against the men in the uniform who are laying down their lives on the battle fields of France.

MARCH MEETING OF THE CALIFORNIA STATE BOARD OF HEALTH.

The State Board of Health met in Sacramento March 2, 1918. The following members were present: Dr. George E. Ebright, president; Dr. F. F. Gundrum, vice president; Dr. Edward F. Glaser, Dr. Adelaide Brown, Dr. Robert A. Peers, and Dr. W. H. Kellogg, secretary.

Prof. W. B. Herms, Consulting Parasitologist in the Bureau of Communicable Diseases, was given leave of absence for the period of the war, beginning February 15, 1918. Mr. Stanley B. Freeborn was appointed as Acting Consulting Parasitologist during Professor Herms' absence.

Dr. J. R. Snyder, Bacteriologist in Charge of the Northern Branch Laboratory, was also given a leave of absence during the period of the war.

Dr. John N. Force, Assistant Professor of Hygiene in the University of California, was appointed Consulting Epidemiologist in the Bureau of Communicable Diseases.

Upon the recommendation of Dr. H. G. Irvine, Director of the Bureau of Venereal Diseases, certain amendments to the board's rules and regulations for the prevention of syphilis and gonococcus infections were adopted.

Upon the recommendation of the Director of the Bureau of Registration of Nurses, certificates were granted to two registered nurses through reciprocity. In accordance with the further recommendation of the Director of the Bureau of Registration of Nurses the nurses training schools in connection with the following hospitals were placed on the accredited list for one year: Alameda County Hospital, San Leandro; Emergency and General Hospital, Los Angeles; French Hospital and the German Hospital, San Francisco; Redlands Hospital, Redlands, and the White Hospital, Sacramento.

Upon the recommendation of the Director of the Bureau of Sanitary Engineering, final permit for supplying water under certain conditions to the citizens of Watsonville was granted to the Watsonville Water Company. A similar permit was granted to the city of San Bernardino for supplying water to the citizens of San Bernardino, from Lytle Creek. Upon the further recommendation of the Director of the Bureau of Sanitary Engineering temporary permits to operate swimming pools were granted to the city of San Jose; Commission of Public Parks and Buildings, Pasadena; Sequoia Resort Baths, Napa, and the Hotel Vendome Company, San Jose. Permit to construct sewers and interceptor at Hammonton was granted to the Hammon Engineering Company of San Francisco.

The license of the Mason Ice and Cold Storage Company of Lodi was transferred to the Union Ice Company of San Francisco. The name of the Lodi plant in the future will be the Lodi Ice and Cold Storage Company. Upon the recommendation of the Director of the Bureau of Foods and Drugs a license to operate a cold storage warehouse was granted to the Home Ice and Cold Storage Company of Long Beach. The report of the Food and Drug Inspection Committee was approved, following which a number of alleged violations of the Food and Drug laws came before the board for hearing.

REPORT OF THE BUREAU OF ADMINISTRATION FOR FEBRUARY, 1918.

W. H. KELLOGG, M.D., Director.

ACTIVITIES OF THE STATE DISTRICT HEALTH OFFICERS.

North Coast District.

ALLEN F. GILLIHAN, M.D., State District Health Officer, Santa Rosa.

During February Dr. Gillihan visited Dillon Beach, Sonoma State Home at Eldridge, Petaluma, Sausalito, Benicia, Suisun, Vacaville, Cloverdale and Ellensburg. Conferences with the Directors of the Bureaus of Sanitary Engineering and Communicable Diseases were held in Berkeley. Various problems relating to the work of these bureaus in the North Coast District were considered. Weather conditions prevented extensive field work in these sections of the district.

Northern District.

HAROLD F. GRAY, Gr. P.H., State District Health Officer, Chico.

Mr. Gray visited the following places in his district during February: Briggs, Gridley, Marysville, Hammonton, Yuba City, Live Oak, Sacramento, Truckee, Corning and Hamilton City. During the month Mr. Gray prepared an extensive report of a health survey of Marysville, which report was presented to the Board of City Trustees.

Central Coast District.

R. N. HOYT, State District Health Officer, San Jose.

During February Mr. Hoyt undertook considerable inspection work in Palo Alto, Menlo Park and in the vicinity of Camp Fremont. He also visited Campbell, San Mateo, Livermore, Berkeley, San Lorenzo, San Leandro, Hayward, Los Gatos, Santa Clara, Redwood City, San Bruno and San Francisco. A wide variety of public health matters was taken up with health officers in the places named.

Central District.

RALPH W. NAUSS, M.D., State District Health Officer, Fresno.

Dr. Nauss during February visited Sawyer, Reedley, Dinuba, Kingsburg, Selma, Fowler, Hanford, Lemoore, Visalia, Corcoran, Merced, Modesto, Stockton, Knights Ferry, Oakdale and Le Grange. A large part of Dr. Nauss' time was taken with the proposed organization of local health districts.

South Coast District.

EDWARD D. WARD, M.D., State District Health Officer, 210 Union League Building, Los Angeles.

The State Health Officer for the South Coast District during February visited Oxnard, Santa Barbara, San Diego, Camp Kearny, Chula Vista, National City, East San Diego, La Mesa, Pomona, La Verne and San Dimas.

Southern District.

EDWARD A. INGHAM, State District Health Officer, Riverside.

Mr. Ingham during February made an inspection of the eighteen school buildings of San Bernardino and took up many important problems relating to health supervision in that city. He also visited Arlington, Blythe, Redlands, Corona and Los Angeles. Mr. Ingham did considerable work in Riverside in connection with preparation for the new government aviation camp to be located at Alessandro.

MORBIDITY REPORTS.

GUY P. JONES, Morbidity Statistician.

Cerebrospinal Meningitis (epidemic).

Twenty-four cases of this disease were reported during February as against 27 cases reported during January. These cases were distributed as follows: Los Angeles County 3, Los Angeles (city) 1, Orange County 1, Riverside 1, Mare Island 2, Naval Training Camp, San Diego 2, Merced County 1, Martinez 1, Modesto 1, Oakland 2, Alameda County 2, San Francisco 4, Solano County 1, Stockton 1, and Camp Kearny 1.

Diphtheria.

Diphtheria shows a slight reduction during February, but 262 cases having been reported, while 340 cases were reported during January.

Leprosy.

One case of leprosy was reported during February. This case was reported from Oakland.

Measles and German Measles.

There were 5,299 cases of measles and 1,389 cases of German measles reported during February. This is more than twice as many cases of these diseases as were reported during January. Both diseases were prevalent in all parts of the state, but were present in greater numbers in southern California.

Smallpox.

Smallpox showed a considerable increase during February, as 74 cases of the disease were reported, while but 42 cases were reported during January. Some of these cases reveal sources of infection in other states. The 74 cases reported appeared in the following places: Madera 1, Fresno County 3, Fresno (city) 3, Los Angeles County 3, Los Angeles (city) 9, San Francisco 11, Presidio 1, Stockton 1, Orange County 3, Santa Ana 5, San Bernardino County 2, Lake County 1, Selma 1, Redding 1, Dunsmuir 2, San Joaquin County 2, Imperial County 4, Kern County 2, Tehama County 5, Riverside County 3, Alameda County 1, Oakland 3, Sacramento 2, San Mateo County 1, San Diego 1, Sausalito 1, Calexico 2.

Poliomyelitis.

There was but one case of poliomyelitis reported during February. This case was reported from Delano, Kern County.

Typhoid Fever.

Typhoid Fever continued to decrease during February, during which month there were but 53 cases reported. These were scattered over the state, there having been no outbreak of importance.

Morbidity for February, 1918, by Weeks.

	Weeks ending—				Total, Feb., 1918	Total, Feb., 1917
	Feb. 9	Feb. 16	Feb. 23	Mar. 2		
Anthrax -----						
Beri-beri -----						
Cerebrospinal menin- gitis (epidemic) -----	5	9	7	3	24	4
Chickenpox -----	217	237	248	202	904	788
Cholera, Asiatic -----						
Dengue -----						
Diphtheria -----	62	89	52	59	262	316
Dysentery -----	1			1	2	
Erysipelas -----	19	21	17	9	66	49
German measles -----	309	348	400	332	1,389	23
Glanders -----						
Gonococcus infection --	42	71	51	59	223	110
Hookworm -----				1		
Leprosy -----				1	1	3
Malaria -----	1	1	7	2	11	17
Measles -----	1,467	1,121	1,215	1,496	5,299	3,305
Mumps -----	179	176	313	209	877	898
Ophthalmia neonatorum	2		1	2	5	4
Paratyphoid -----						
Pellagra -----	1	1	1		3	
Plague -----						
Pneumonia -----	78	65	63	71	277	238
Poliomyelitis -----				1	1	2
Rabies -----						
Rocky Mountain spotted fever -----						
Scarlet fever -----	111	124	89	83	407	622
Smallpox -----	11	22	16	25	74	64
Syphilis -----	76	39	36	46	197	123
Tetanus -----			1	1	2	2
Trachoma -----	1	3	2	2	8	9
Trichinosis -----			2	2		
Tuberculosis -----	192	120	135	191	638	563
Typhoid fever -----	16	12	13	12	53	57
Typhus fever -----						
Whooping cough -----	88	69	101	85	343	133
Yellow fever -----						
Totals -----	2,877	2,528	2,768	2,895	11,068	7,330

SANITARY INSPECTIONS.

EDWARD T. ROSS, Sanitary Inspector.

During the month of February inspections and reinspections of river steamers, food supply places, dairies, slaughter houses, canneries, hotels, sewage disposal systems, water supplies, etc., were made in and about Fairfield, Vacaville, Dixon, Sacramento, Loomis, Auburn, Rocklin, Lockport, Walnut Grove, Isleton and Stockton. The majority of sanitary improvements recommended in the above-mentioned places have been made.

Because of the presence of several cases of typhoid fever in the vicinity of a dairy on the outskirts of Sacramento special investigations of the sanitary conditions at the dairy and at the premises where the typhoid fever occurred were undertaken. As a result of these investigations a well underneath the dwelling house on the premises aforesaid proved to be grossly contaminated. Recommendations were made for removing all insanitary conditions on the premises.

Many complaints relative to insanitary conditions in various localities were investigated and improvements recommended.

Nineteen sanitary reports, covering food supply places, river steamers, public schools, sewage disposal systems, etc., were submitted.

SUMMARY OF OPERATIONS.

Investigations of typhoid fever-----	3
Food supply places inspected and reinspected-----	21
Dairies inspected-----	5
Slaughter houses inspected-----	4
Public schools reinspected-----	5
Public institutions reinspected-----	1
River steamers reinspected-----	9
Sewage disposal systems reinspected-----	4
Water supplies inspected-----	7
Water samples collected-----	7
Miscellaneous premises inspected-----	80
Sanitary reports submitted-----	19
Nuisances abated-----	90

REPORT OF THE BUREAU OF COMMUNICABLE DISEASES
FOR FEBRUARY, 1918.

FRANK L. KELLY, M.D., Acting Director.

Division of Biological Examinations.

*Summary of Examinations Made in the California State Hygienic Laboratory During
the Month of February, 1918.*

Condition suspected	Positive	Negative	In- conclusive	Total
Main laboratory at Berkeley—				
Anthrax-----		5		5
Diphtheria (diagnosis)-----	13	112	2	131
			*4	
Diphtheria (release)-----	3	22	*2	27
Diphtheria (school investigations) ¹ -----	19	126		145
Gonococcus infection-----	27	24		51
Malaria-----		1		1
Meningitis-----		1		1
Rabies-----	4	5		9
Syphilis (Wassermann test)-----	62	309	30	401
Tuberculosis (sputum examinations)-----	8	27	1	36
Typhoid (Widal test)-----	13	14	2	29
Typhoid (excreta)-----	2	11		13
Miscellaneous-----				5
Miscellaneous-----			†	1
				855
Northern branch at Sacramento—				
Diphtheria (diagnosis)-----	4	18	*1	23
Diphtheria (release)-----	12	28		40
Malaria-----		4		4
Tuberculosis (sputum examinations)-----	15	20		35
Typhoid (Widal test)-----	2	13	1	16
				118
Central branch at Fresno—				
Diphtheria (diagnosis)-----	6	21		27
Diphtheria (release)-----	3	6		9
Malaria-----		1		1
Tuberculosis (sputum examinations)-----	3	7		10
Typhoid (Widal test)-----		6		6
				53

Division of Biological Examinations—Continued.

Condition suspected	Positive	Negative	In-conclusive	Total
Southern branch at Los Angeles—				
Anthrax -----	1			1
Diphtheria (diagnosis) -----	18	52	2	
			*3	75
Diphtheria (release) -----	60	124	5	189
Diphtheria (school investigations) ² -----	21	162	8	191
Gonococcus infection -----	6	4	3	13
Meningitis -----	1	6		7
Tuberculosis (sputum examinations) -----	9	27		36
Typhoid (Widal test) -----	3	24		27
Miscellaneous -----				5
Water -----				72
				616
Total number of examinations -----				1,642

*No growth. †Incomplete.

¹Cultures taken from school children at Willits, 145.²Cultures taken from school children at La Verne, 191.

Division of Epidemiological Investigations.

Epidemiological Investigations and Other Special Investigations During February, 1918.

Main laboratory at Berkeley—

An investigation of typhoid fever at San Jose.

Division of Preventive Therapeutics.

Pasteur Treatment for the Prevention of Rabies by the State Hygienic Laboratory During the Month of February, 1918.

	Treatment commenced	Treatment completed
Main laboratory at Berkeley -----	0	0
Northern branch at Sacramento -----	0	0
Central branch at Fresno -----	0	0
Southern branch at Los Angeles -----	0	0
Laboratory of Sacramento Board of Health, by deputized bacteriologist -----	0	0
Laboratory of San Francisco Board of Health, by deputized bacteriologist -----	0	0
Laboratory of Los Angeles Board of Health, by deputized bacteriologist -----	0	0
Laboratory of San Diego City Board of Health, by deputized bacteriologist -----	0	0
Laboratory of Letterman General Hospital, Presidio, by deputized bacteriologist -----	0	0
Laboratory of United States Naval Hospital, Mare Island, by deputized bacteriologist -----	0	0
	0	0

Vaccine for the Prevention of Typhoid Fever Issued by the State Hygienic Laboratory During the Month of February, 1918.

Number of physicians to whom vaccine was sent -----	4
Number of complete treatments sent -----	125
Paratyphoid vaccine, number of treatments issued -----	6

Ophthalmia Neonatorum Prophylactic Outfits Distributed During the Month of February, 1918.

Number of outfits, containing two ampoules each, issued -----	185
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Public Health Instruction.

Participation in Instruction in Public Health During February, 1918.

Main laboratory at Berkeley—

Bacteriological instruction outfits sent out.....	2
Bacteriological instructions in use.....	24

BIOLOGICAL DIVISION.

WILLIAM W. CORT, Ph.D., Acting Consulting Biologist.

During this month the hookworm work in the mines of Amador County has been pushed as rapidly as possible in order to complete the survey in this region in the near future. A number of the mines already examined are voluntarily adopting the program of sending in samples of feces for hookworm examination from all new men entering their employ. This system once established in the mines means a continual stream of samples coming in for examination, and if generally adopted will be of great service in eradicating hookworm infection. Dr. J. F. Worley of the Federal Bureau of Mines, who is making a survey of the mining regions of the state in Bureau of Mines Car No. 1, is cooperating with the Biological Division in procuring samples for hookworm examination from miners in various parts of the state. The purpose of these examinations is to make a preliminary survey of the state for the searching out of the foci of infection and determining where intensive surveys are necessary. During the past month Dr. Worley made it possible for the Biological Division to obtain almost 100 fecal samples from four borax mines in the southern part of the state.

Statistics on treatments of infected men brought up to about February 15 show that out of 136 men found up to February 1 to be infected with hookworm, 44 have received treatment. A considerable number of infected men have left the Mother Lode. Every effort is being made to keep track of these men, but a number dropped entirely out of sight. Treatment is being pushed vigorously by the various agencies undertaking it. To be sure that treated men are cured an examination of their stools must be made after treatment. A record of such reexaminations will be included hereafter in each monthly report.

Mr. Walter F. Pyne, First Aid Instructor for the Mining Division of the Industrial Accident Commission, who is touring the smaller mining regions of the state, has taken a hookworm exhibit from our laboratory and will give a short talk on hookworm in connection with his mine safety instruction. Since Mr. Pyne will reach numbers of the smaller mines his publicity work will be of great importance to the hookworm campaign.

The Biological Division has in press an article on "Sanitation in Mines for the Prevention and Eradication of Hookworm" by Charles A. Kofoed and William W. Cort. This article is planned especially for the information of mine operators and superintendents, and contains a considerable amount of information on underground toilets. Dr. R. W. Nauss, Health Officer of the Central District, has sent in records of inspections of a number of mines of the Mother Lode region. He has inspected these mines especially in regard to conditions favoring the introduction and spread of hookworm. His reports contain much valuable data and will be of great help in our campaign for proper underground toilets in the mines.

Summary of Examinations Made in the Biological Laboratory of the State Board of Health During the Month of February.

Condition suspected	Positive	Negative	In-conclusive	Total
Hookworm	29	202	0	231
Oxyuris vermicularis	1	0	0	1
Reexaminations after treatment for hookworm	2	5	0	7

REPORT OF THE BUREAU OF TUBERCULOSIS FOR FEBRUARY, 1918.

E. L. M. TATE-THOMPSON, Director.

Following the Red Cross Seal sale, 55 Red Cross chapters, besides many associations throughout the state, formed tuberculosis committees, and 75 per cent of the money derived from the sale was allowed to be retained by the chapters acting as agents. This is perhaps the most significant and hopeful piece of work that has been done this year.

The bureau, after conference with the Director of Civilian Relief of the Pacific Division, Red Cross, is to act as the clearing house for all tuberculosis cases in discharged soldiers in the state. An arrangement has also been made, in remitting the 75 per cent back to the chapters, whereby the Tuberculosis and the Civilian Relief committees instead of sharing alone the expense and responsibility of caring for discharged tuberculous soldiers, now bear half the expense, which is very little for each group. This is done so that by next winter the machinery will be ready, and this is the preparedness program of the bureau and of the California State Association for the Study and Prevention of Tuberculosis. It has helped more than any one, not in close touch with the soldiers, can possibly know, to realize that places are being made ready; that even though building materials are high, that the California men will not be in the position that some of the men from other states are in, where no immediate provision is being made.

The state subsidy is granted to a county on condition that its hospital is giving adequate care to the indigent tuberculous patients of its community.

When a hospital like San Francisco's has a waiting list of fifty patients all winter, coupled with the fact that there is no place in San Francisco where rejected drafted men or discharged soldiers can be sent, it is not giving adequate care, and the action of the Board of Health in suspending the hospital was fair, since San Francisco has shown no signs of meeting the added problem of caring for its rejected and discharged men. Shortly after the suspension of the subsidy the bureau was assured that \$50,000 would be allowed in the budget for an outside sanatorium.

The San Francisco patients who, last year, moved over to Alameda County in order to establish a residence and in so doing enter the Arroyo Sanatorium, might just as well move back to San Francisco. Alameda County must care for its own patients first and, incidentally, patients must have lived in the county two years prior to the opening of the sanatorium before they are eligible for care there.

San Francisco has the enviable reputation throughout the state of having "gone over the top" in every campaign they have had this past year, with the possible exception of the Camp Fremont fund, so let them go over the top once more and save the first lot of rejected and discharged tuberculous soldiers. It's one thing for a man to march down Market street with bands playing and people cheering, but it's another story if you will stand with me some morning at the Base Hospital at Camp Kearny when a man is about to be discharged on account of tuberculosis and have to tell him, when he asks where he can go, that the San Francisco Tuberculosis Hospital is always crowded with a long waiting list. Besides, such a hospital is no place for a man in the early stages of tuberculosis, who does not need hospital care, but rest in the country under proper conditions with the balanced diet and medical supervision that all early cases need.

Not all the fighting in this war is on the western front, and committees in California want to remember that it will take a mighty effort to keep up the morale of these disappointed, disheartened, discharged tuberculous soldiers. The bureau is willing to do three-quarters of the work, but somebody must do the other quarter, and it need not necessarily be the soldier.

Kern County is to build its own hospital now. Tulare and Kings will build a joint tuberculosis hospital at Springville.

The plans for the joint county hospital of the ten northern counties are nearly finished, as are likewise the plans of the joint hospital for Los Angeles, Santa Barbara and Ventura.

Conferences have been held with the Japanese Clinic in San Francisco.

Several meetings have been held with Red Cross chapters and various committees wanting county visiting nurses.

The director spoke at the annual dinner of the Alameda County Tuberculosis Association on the twenty-seventh of February.

The special field worker, who investigates the rejected and discharged men in Los Angeles, has been able to lighten the burden in many families, through her friendly advice. The simple rules of hygiene and sanitation have seemed easier to follow after her visits.

But by far the most valuable work done has been to furnish proof of the physicians' findings to the men called in the second draft, who had been excluded in the first draft on account of tuberculosis, and to urge their exemption the second time.

Hospitals inspected:

Fresno (2).

San Francisco (1).

Los Angeles (1).

REPORT OF THE BUREAU OF VENEREAL DISEASES FOR FEBRUARY, 1918.

H. G. IRVINE, M.D., Director.

On February 14 Dr. Watters, of the bureau, was one of a committee from the San Francisco Bay region which presented to Governor Stephens the immediate necessity for the erection of the first unit of a moron colony. Sonoma State Home, the only state institution in California for the permanent custodial care of the feeble-minded, has a waiting list of nearly four hundred, and there are now at large, and in charitable institutions, 120 moron girls who are known to be promiscuously immoral. Most of these girls have had gonorrhœa or syphilis, or both, and some are still under treatment. Twenty-two of them are known to have had immoral sex relations with men in the Army. Therefore, it has become imperative that an institution for their care and training should be built at once in order that this menace may be removed from the vicinity of the camps.

The Governor and the State Board of Control expressed their approval and plans are to be made immediately for the construction of a cottage which will be the first unit of an industrial custodial institution for those girls whose mental defect is lack of moral training and whose instability of character makes them candidates for prostitution and for the dissemination of venereal diseases.

Progress in Oakland.

In Oakland, women charged with vagrancy have been handled by the federal authorities, but owing to the fact that other cases are increasing in number, hereafter only those cases in which women are definitely charged with being inmates or keepers of houses of prostitution will be tried by the federal representatives. Therefore, this work will now be in the hands of the local police judges and it is expected that the program as carried out in other parts of the state will be put in force in Oakland. The county hospital receives for treatment any infected woman and the city health department cooperates by examining the prisoners as soon as notified. Miss Flynn, of the Adult Probation Office, is obtaining sociological data in order to aid in the rehabilitation of these women.

It is planned to open a much needed venereal disease clinic in the emergency hospital. The arrangements are now under advisement by the hospital committee.

The last of February saw the favorable conclusion of a well-conducted red light abatement suit in Oakland. District Attorney Hynes and his staff deserve great commendation for this result.

Special Work

It is interesting to note that seven prostitutes who were examined in Truckee by Dr. Watters, sanitarian of this bureau, were all found to have laboratory evidence of syphilis or gonorrhœa. Two of them had both.

Dr. Olga Bridgman and Dr. Watters will administer salvarsan one evening each week to the wards of the San Francisco Juvenile Court who are in need of treatment. This clinic is conducted by the Pediatrics Department of the University of California Medical School, but the shortage of physicians in this department makes this emergency evening clinic a necessity.

Literature of the Bureau.

During the month a new pamphlet has been issued by the bureau entitled "Instruction for Mothers on Teaching Girls the Laws of Sex." This will be used particularly in connection with courses of lectures on social hygiene which the bureau expects to inaugurate in the near future. Up to date approximately 5,000 of the pamphlets on syphilis have been distributed and about 10,000 of the pamphlets on syphilis and gonorrhœa have been given out. Following the publication in the Journal of the American Medical Association of the report on the work of the bureau, there have been received, to date, inquiries from about thirty states of the country, and one inquiry from Cuba, asking for copies of the bureau's pamphlets and literature. This indicates not only the interest in the work in general, but also how carefully the work as planned in California is being observed.

Some Results in Which the Bureau Has Participated.

The bureau has been cooperating directly with all of the organizations concerned in law enforcement regarding prostitution and has arranged as far as possible for special medical treatment of the inmates wherever open houses have been closed. One result worthy of mention and which undoubtedly bears a definite relation to the reduction of venereal diseases, is the greatly lessened number of cases going through the police court in San Francisco. There were nearly 400 cases in the police court in October under Judge Brady, whereas in February in the same court, under the same judge, only 85 cases were registered under charges of sex immorality. In a former report, the bureau called attention to the marked reduction of prophylactic treatments as well as infections following these activities.

The bureau also assisted directly in the examination and quarantine of inmates in Grass Valley, Nevada City, Auburn, and Truckee.

As evidence of the marked interest created by the campaign, attention is also called to the fact that in 1916 about fifteen or sixteen hundred cases of gonorrhœa and syphilis were reported, whereas in 1917 something over four thousand cases were reported.

The hospital and dispensary facilities have been markedly increased as a result of the work. Attention is called to the special hospital, the Los Feliz, in Los Angeles, with fifty beds; the Mission Valley Hospital in San Diego, with thirty beds, the arrangement for dispensary treatment of women in the Los Angeles Health Department's clinic, the admittance of acute cases to the Los Angeles County Hospital, the formation of a special department of venereal diseases under the Los Angeles County Health Department, the formation of a special clinic under the Health Department in Fresno, a special clinic under the Health Department in San Jose, and the stimulation of more careful and accurate work in various other dispensaries throughout the state.

Attention should be called to the fact that a large number of inquiries from other places demonstrates that the California plan is serving as a model for many other states.

Up to date, over 1,300 doses of salvarsan have been distributed and treatment cards for 372 patients returned.

At the suggestion of the bureau, jail surveys have been made in Los Angeles and San Francisco, resulting in getting many prisoners adequately treated before their dismissal.

A large amount of literature has been distributed which must have at least a definite educational effect.

Attention should be called to the fact that Camp Kearny, consisting of the largest group of men mobilized in the state, has for several months had a record of having a very small number of new cases of venereal diseases, compared to other camps throughout the country.

The Director's Trip to Minnesota.

At the request of the Minnesota State Board of Health, the Director was given a leave of absence for a month to go East and assist in organizing a division of venereal diseases in that state. During his stay in Minnesota, Dr. Irvine, in conjunction with a number of people interested, went before the Public Safety Commission of the state of Minnesota and the officials of the state, and succeeded in obtaining an appropriation of \$35,000 from the state, for the organization of a division of venereal diseases under the State Board of Health. In general, the California plan will be followed.

San Francisco.

Weekly conferences are now held under the auspices of the local members of the California Military Welfare Commission, at which time various officials are invited in.

The San Francisco Center of the California Civic League, under Dr. Adelaide Brown as chairman of the Public Health Committee, has arranged for a most excellent program under the general topic, "A Nation-Wide Call to Women." The opening lecture on February 23 was given by the director of the bureau, and on March 9 Dr. Ethel Watters of the bureau contributed. The bureau realizes the very great need and opportunity for educational work along this line and hopes shortly to work out a very definite campaign.

Plan of Social Service Work.

During the month, Miss Lynne has been engaged in completing arrangements for the social service work of the Los Feliz Hospital in Los Angeles, and the Mission Valley Hospital in San Diego. In connection with this the following plan for social service work has been proved as applicable, especially to Los Angeles:

STEP 1. *Procedure after arrest for vagrancy, etc.*

The physical condition of every case will be ascertained by the tests given in the jail. Well cases will proceed to trial and if desirable will go into the hands of the woman probation officer for follow-up and placement where possible. Mental tests of well cases will be made by an expert and followed up by the teacher assigned by the Board of Education, who is trained in manual occupations. Housing for these may be provided in the home at present conducted by the said officer. Infected cases will become at once wards of the State Board of Health and as such will be sent without delay to the Los Feliz Hospital for detention until cured, noninfectious, or dismissed to clinic. During their detention, social service work as detailed below will be done with a view to later rehabilitation. After a clean record is secured the case will be returned for disposition by the court. If, in the opinion of the social service department, it is a case for clemency, recommendation will be made, accompanied by a record of the steps taken to arrive at the conclusion and the proposed disposition of the case. This recommendation will come through the hospital committee. The record will be kept on uniform history blanks and will be based upon the physical, mental, sociological and economic status of the case.

STEP 2. *Hospital organization.*

Authority and supervision of health officer and representative.

Detailed supervision of hospital committee of social service department.

(a) Clinician and nurses for treatment, to examine and admit all cases and treat until cured or noninfectious; to keep clinical record and notify matron when case is ready to leave hospital.

(b) Matron, under whom the help and the guards work, to have charge of maintenance and care of patients, of all social service work and records of same; to be responsible for retention and behavior of inmates; to make disposition of all patients when ready to be returned to the court. The guards to work on the outside, the cook to be assisted by any able-bodied members among the patients.

(c) Order of day.

Regulations: Proper dress and neat appearance to be required of all able-bodied patients. A work room with machines will enable those skilled to renew the stock of apparel, etc., needed by the inmates. The garden will afford occupation for some. Visitors will be limited in character, frequency and conditions of visit at the discretion of the matron.

The psychiatrist to attend and to make tests of mentality. The vocational adviser to have access to all patients, who, in her judgment, may profit by her care, provide manual occupation and suggest lines along which further training may be of help in rehabilitating the case. Religious services to be at the discretion of the matron and hospital committee as to conduct and character of service, attendance of patients, etc. A due proportion of outdoor life, to be the right of every inmate daily, subject to the decision of the matron, who may be assisted by the nurses when not assisting the clinician. Further regulations to be subject to the action of the hospital committee.

STEP 3. *Case history blanks.*

These are provided in forms general enough to allow for adaptation to various uses, e. g., jail survey, mental tests, vocational suggestion, hospital report, etc. They are to be kept at the hospital to be accessible to call and a committee will advise with the matron as to their satisfactory return. It is intended that later use shall be made of

these in laying before the state representatives the results of the social service work and to afford data to those interested in the history of prostitution and proposed means of meeting its problems. This may serve eventually as a real contribution to the sociological aspect of the question.

STEP 4. *Emergency housing for rehabilitation cases.*

The general opinion in this community is against a large or prominent detention home, for the following reasons: the girls can not all be committed to such a place; without detention they are unlikely to go there; they dislike it because it brands them as former prostitutes and thus defeats the end we have in view—of their ultimate restoration to the community as accepted members of society.

The county charities are willing to provide means for the board and room of any girl under the social service care during the period between her dismissal from the hospital and court and her engagement upon a job. This it is suggested would be of most use if offered as a loan to be repaid when the job is secured. The aim is to find a home for two or three girls under the care of a motherly and intelligent woman where they might know what home was like and come into happy relations with its keeper. A job would be the easier to obtain in this way than if sought by the inmate of a detention home. All matters on this count are to be managed by a committee.

STEP 5. *Training.*

Some tentative work may be possible under the supervision of the vocational adviser at the hospital. For all that is salable the girl should be paid. It is planned to have a regular workroom supervised by the vocational adviser for the handicapped, for the training of the girls along special lines. We hope to secure later a teacher for dress-making and millinery who can assist in placing the girls when ready. One at least of the factory owners has offered to train girls for power machine work upon his own machines. A committee for this is in course of creation.

STEP 6. *Employment.*

The exigencies of the situation are likely to call on us to get jobs for girls before there has been time to train them for special lines of work. A committee on employment is thus more pressing than the above. We therefore are at work on this problem as a necessity of the near future. The domestic and waitress jobs are not under consideration, nor, except for well girls, the laundries. Shop work behind the counter is also undesirable. The stock rooms and wrapping departments, the small factories, millinery and dressmaking rooms and some of the better factories among those for candy, power machine work, and dried fruit and canning, are better worth while. We shall depend upon places that maintain a welfare department for special assistance and shall call the state and federal employment agencies to our help. The union secretaries are available for advice.

STEP 7. *Defectives.*

The last three steps are intended only for girls of normal mentality. For the others there is but one disposition—permanent homes in detention, where they may do as much as is within their power, not exposed to situations they are unable ever to meet with self-control. The moron colony, whether or not it is included in the plan for the home for the feeble-minded, is the mecca for these hopeless cases. A farm home where the maximum of open air may secure their well-being, with the work upon a ranch for the raising of small garden truck, fruit, etc., would be likely to win the most popular support at the present time and might be the most economic disposition of poor creatures equally victims of, and menaces to, the well-being of the community.

Attention may be drawn to the following points in the plan outlined:

1. Classification of patients for follow-up work after dismissal from the hospital into three classes:

(a) The mental defectives, who should be disposed of in institutions provided for them.

(b) The incorrigibles, who need to be permanently held in detention and put to some form of agricultural or industrial work, where they might be made useful to the community instead of an ever recurrent menace upon the streets.

(c) The small proportion of girls of good mentality, youth, fair intention, who are accessible to the idea of rehabilitation.

We shall need to have a line of attack prepared to deal with each of these three classes.

2. Immediate need for consideration throughout the West of institutions such as are equipped to take care of the high-grade moron not hitherto considered eligible for incarceration in feeble-minded institutions, but from the point of view of prostitution, one of the most serious menaces in the transmission of venereal disease. Another institution greatly needed in this state and probably throughout the West is a detention home for the adult women incorrigibles where they can be trained in industrial and agricultural activities. The securing of one or both of these, through city, county or state means is, in our opinion, an essential to the follow-up of cases of venereal disease, brought in through the repressive agencies of other cities.

3. The very large amount of protective work for girls on or near the border line that should be done through the cooperation of the older women in shops and factories where large numbers of young girls are employed. As an instance of this, in San Francisco the Emporium is now organizing a club of some fifty older women along these lines in the interests of the younger girls. In Fresno alone, there is a plan afoot to secure the cooperation of five small dry goods stores in the town to pay a good social worker to do similar work among the employees of each store.

4. It might also be pointed out that there is in every city some form of citizen bodies interested in municipal welfare, members of which, especially the men, should be readily engaged in the support of the community's unfortunates, as, for instance, the public affairs committee of the municipal league of Los Angeles, the morals efficiency association of Los Angeles.

5. Among the officials engaged in city and county work there are certain bodies who may be called upon to do their share of the constructive work. In this connection could be instanced the parole boards, the juvenile protective associations, the justices of the peace, the boards of supervisors, police court judges and many others.

Lastly, a very strong point may be made upon the absolute and fundamental necessity of engaging the community itself in this work. Police and medical assistance are both needed, but neither can accomplish this work unless the varied and practical cooperative agencies of the community are enlisted to the utmost of their capacity. This last statement can not be too strongly emphasized.

What the Bureau Offers.

The following letter is being sent to the Commanding Surgeons of Army and Navy stations in the state:

The Bureau of Venereal Diseases of the State Board of Health was organized for the express purpose of combating venereal diseases in both the soldiers and sailors and the civil population. Its work is done in direct cooperation with the War and Navy departments and the Surgeon General's office. For this reason it desires to call your attention to what it is doing and what it is offering.

It issues a pamphlet on "Gonorrhœa and Syphilis" for patients.

It issues a pamphlet on "Syphilis" for physicians.

It issues a pamphlet "Instructions for Mothers on Teaching Girls the Laws of Sex."

It furnishes special placards to be posted in latrines.

It issues a pamphlet on "Rules and Regulations for Venereal Disease Control."

Copies are enclosed and will be furnished in any quantity desired for any camp.

In cooperation with the Commission on Training Camp Activities it offers and pays expenses of illustrated lectures on Social Hygiene and Venereal Diseases. Through the same agency it offers an exhibit for every camp.

It offers the use of a stereomotograph showing automatically slides on sex hygiene and venereal disease. This machine is now at Camp Kearny and may later be used at other large camps.

It offers the services of the State Board of Health Laboratory for examination of blood for syphilis and slides for gonococcus. Containers will be mailed on request.

It offers to place any physician's name on the mailing list for the Monthly Bulletin containing reports of the Bureau of Venereal Diseases and items of general interest in public health work.

It offers special investigation of any reported source of infection of gonorrhœa or syphilis.

In general, the bureau will undertake to assist in the solution of any problem connected with the campaign against venereal disease, in which any official of the Army or Navy desires assistance or cooperation.

Report on Distribution of Salvarsan During February, 1918.

Number of doses of arseno-benzol sent to health officers and approved dispensaries.

Los Angeles Health Department.....	305
County Hospital and jails.	
Municipal Clinic.	
Los Feliz Hospital.	
San Jose Health Department.....	50
San Francisco Health Department.....	49
County Jail No. 1.	
San Francisco Hospital.	
Isolation Hospital.	
Fresno County Hospital.....	36
Stanford University Clinic.....	25
Mission Valley Hospital, San Diego.....	25
Selwyn Graves Memorial Dispensary.....	20
Santa Barbara Cottage Hospital.....	12
San Francisco Polyclinic.....	12
University of California Clinic.....	10
Children's Hospital, San Francisco.....	10
Monterey County Hospital.....	9
Berkeley Dispensary.....	3
Yuba County health officer.....	3
San Mateo County health officer.....	3
Sonoma County health officer.....	1
Total	573

Treatment Reports Received.

47 patients received 1 dose	47	
21 patients received 2 doses	42	
10 patients received 3 doses	30	
3 patients received 4 doses	12	
		131
81		
Prostitutes	21	
Other occupations	54	
Laborer	12	
Housewife	9	
Domestic	10	
Waitress	3	
Cook	3	
All others	17	
No occupation	6	
		81
Males	34	
Females	47	
		81

Patients Treated.

Santa Clara County Hospital	17
Fresno County Hospital	13
Los Feliz Hospital	12
Nevada County Hospital	8
Temple Block Clinic, Los Angeles	8
University of California Clinic	7
Children's Hospital	5
Stanford University Clinic	4
Cottage Hospital, Santa Barbara	3
San Mateo County Hospital	2
San Francisco Isolation Hospital	1
Berkeley Dispensary	1
	81
Total number of arseno-benzol ampoules distributed	1,341
Total number of treatment cards received	592
Total number of treatment cards distributed and not returned	749

REPORT OF THE BUREAU OF VITAL STATISTICS.

GEORGE D. LESLIE, Director.

Births, Deaths and Marriages for January.*

State, Totals and Annual Rates. The following table shows for California as a whole, the birth, death and marriage totals for the current month of the year to date in comparison with corresponding figures for last year, as well as the annual rates per 1,000 population represented by the totals for the current month and the year to date. The rates are based on an estimated midyear population of 3,129,584 for California in 1918 the estimate having been made by the United States Census Bureau method with slight modifications.

Birth, Death and Marriage Totals, with Annual Rate per 1,000 Population, for Current Month, for California: January.

Month	Total		Annual rate per 1,000 population, 1918
	1918	1917	
January—			
Births	4,249	3,659	16.0
Deaths	3,691	4,160	13.9
Marriages	2,684	2,371	10.1

NOTE.—The present report is for the month preceding but two. This order must be followed because of the publication of the Bulletin during the early part of the month, before the tabulation of records for the next preceding month is completed.

An increase of 590 and 313, respectively, is shown in the birth and marriage totals for January, 1918, over January, 1917, while a decrease of 469 is shown in the death total.

Length of Residence. The length of residence in California for the 3,691 decedents in January was as follows: Under 1 year, 246, or 6.7 per cent; 1 to 9 years, 681, or 18.4 per cent; 10 years and over, 1,706, or 46.2 per cent; life, 915, or 24.8 per cent, and unknown, 143, or 3.9 per cent.

For residents of the 70 cities of 2,500 population in 1910, there were 86 births and 176 deaths which occurred in registration districts other than the city of residence.

County Marriage Totals. The counties showing the highest marriage totals for the month were as follows: Los Angeles, 593; San Francisco, 522; Alameda, 235; San Diego, 160; Orange, 112; Sacramento, 86; Fresno, 82; San Joaquin, 81; Santa Clara, 81; San Bernardino, 73; Marin, 54; Riverside, 53; San Mateo, 51, and Sonoma, 39. The aggregate for San Francisco and other bay counties is 872, against 705 for Los Angeles and Orange counties together.

County Birth and Death Totals. Exclusive of stillbirths in both cases, the birth and death totals for the month were as follows for the leading counties, arranged in decreasing order of birth registration:

County	Births	Deaths	County	Births	Deaths
Los Angeles -----	1,034	985	San Bernardino -----	103	104
San Francisco -----	634	677	Kern -----	98	38
Alameda -----	386	334	Orange -----	93	65
Fresno -----	210	107	Contra Costa -----	82	36
Sacramento -----	149	118	Sonoma -----	76	76
Santa Clara -----	141	122	Tulare -----	69	43
San Diego -----	122	176	Santa Barbara -----	68	41
San Joaquin -----	117	93	Stanislaus -----	62	20

City Birth and Death Totals. Birth and death totals, exclusive of stillbirths, are presented similarly for the principal California cities below:

City	Births	Deaths	City	Births	Deaths
Los Angeles -----	675	628	San Jose -----	57	38
San Francisco -----	634	677	Bakersfield -----	55	23
Oakland -----	264	203	Pasadena -----	53	48
Sacramento -----	95	108	Alameda -----	42	26
San Diego -----	94	119	Long Beach -----	42	56
Stockton -----	71	52	Richmond -----	38	7
Fresno -----	68	42	San Bernardino -----	36	34
Berkeley -----	59	40	Santa Barbara -----	31	27

Causes of Death. The following table shows the classification of deaths in California for the current month, in comparison with the preceding month:

Deaths from Certain Principal Causes, with Proportion per 1,000 Total Deaths, for Current and Preceding Month, for California: January.

Cause of death	Deaths: January	Proportion per 1,000	
		January	December, 1917
All causes -----	3,691	1,000.0	1,000.0
Typhoid fever -----	9	2.4	3.2
Malarial fever -----	3	0.8	1.5
Measles -----	18	4.9	3.5
Scarlet fever -----	5	1.4	1.0
Whooping cough -----	12	3.3	2.5
Diphtheria and croup -----	22	6.0	5.5
Influenza -----	32	8.7	9.0
Other epidemic diseases -----	13	3.5	3.0
Tuberculosis of lungs -----	402	108.9	112.6
Tuberculosis of other organs -----	33	9.0	11.5
Cancer -----	264	71.5	70.9
Other general diseases -----	178	48.2	49.7
Meningitis -----	32	8.7	8.7
Other diseases of nervous system -----	360	97.5	91.9
Diseases of circulatory system -----	569	154.1	151.6
Pneumonia and broncho-pneumonia -----	457	123.8	128.3
Other diseases of respiratory system -----	106	28.7	27.2
Diarrhea and enteritis, under 2 years -----	43	11.7	16.5
Diarrhea and enteritis, 2 years and over -----	16	4.3	6.0
Other diseases of digestive system -----	214	58.0	58.2
Bright's disease and nephritis -----	315	85.4	75.4
Childbirth -----	27	7.3	8.7
Diseases of early infancy -----	120	32.5	36.5
Suicide -----	64	17.3	15.7
Other violence -----	243	65.8	71.9
All other causes -----	134	36.3	29.5

The deaths from the three leading epidemic diseases reported for the month were distributed by counties as follows:

Influenza.		Diphtheria.		Measles.	
Alameda -----	1	Contra Costa -----	1	Fresno -----	3
Butte -----	2	Fresno -----	3	Kings -----	2
Fresno -----	1	Los Angeles -----	3	Los Angeles -----	1
Imperial -----	1	Orange -----	1	Napa -----	1
Los Angeles -----	6	Plumas -----	1	San Diego -----	6
Napa -----	1	Riverside -----	1	San Francisco -----	1
Orange -----	3	San Francisco -----	5	San Joaquin -----	1
Plumas -----	1	San Joaquin -----	2	Tulare -----	2
San Bernardino -----	2	San Mateo -----	1	Ventura -----	1
San Diego -----	5	Shasta -----	1		
San Francisco -----	3	Tulare -----	1		18
San Joaquin -----	2	Tuolumne -----	1		
Santa Cruz -----	1	Yuba -----	1		
Shasta -----	2				
Tulare -----	1		22		
	32				

Sex, Race and Nativity. The proportion of the sexes among the 3,691 decedents in January was: Male, 2,154, or 58.4 per cent of all, and female, 1,537, or 41.6 per cent.

The race distribution of decedents was: White, 3,478, or 94.2 per cent; Japanese, 76; Chinese, 66; Negro, 57, and Indian, 14.

The 3,478 white decedents were classified by nativity as follows: California, 851, or 24.5 per cent; other states, 1,464, or 42.1 per cent; foreign, 1,093, or 31.4 per cent, and unknown, 70, or 2.0 per cent.

Infant Mortality. There were 282 deaths for children under 1 year, which were distributed by age in months as follows: Under 1 month, 153, or 54.3 per cent; 1 to 2 months, 46, or 16.3 per cent; 3 to 5 months, 38, or 13.5 per cent, and 6 to 11 months, 45, or 15.9 per cent.

In certain cities and counties the deaths under 1 year were as follows: San Francisco, 40; Los Angeles, 36, and Oakland, 18.

The 282 deaths under 1 year in comparison with the 4,249 live births reported for the month show an infant mortality ratio of 66 per 1,000 births.

REPORT OF THE BUREAU OF SANITARY ENGINEERING FOR FEBRUARY, 1918.

C. G. GILLESPIE, C.E., Director.

Plumbers' Registration.

The registration of all practicing plumbers in the state, preparatory to examination and certification under chapter 65, 1917 statutes, is progressing satisfactorily with the exception of Alpine, Amador, Calaveras, Del Norte, Glenn, Inyo, Lassen, Mariposa, Modoc, Mono, Plumas, Sierra, Siskiyou and Trinity counties in which a suitable county examining board has not been determined upon. All the other counties in the state now have a Plumbers' Examining Board, appointed by the State Board of Health. Under instructions from this board, the county boards are notifying all plumbers who actually install plumbing work or wish so to do, in cities or towns having a public sewer system, to apply for examination. The county examining boards then issue temporary permits. All plumbers personally installing plumbing works in cities and towns having a public sewer system, after March 15, 1918, without such temporary permit are guilty of a misdemeanor and for each day's offense thereafter are subject to a \$500 fine or to six months' imprisonment, or both such fine and imprisonment. During the next few months an examination will be held and certificate of competency issued to those passing. The public is hereby requested to report violations to this board or to the local examining board.

Sewer Farms.

As a result of the filing of sewer farm reports by some sixty communities employing this form of sewage disposal, it has been discovered that a few are making unlawful uses of the sewage to water garden truck used for human food. This practice was prohibited in resolution dated August 3, 1916, as follows:

"Resolved, That sewage or sewage-polluted water shall not be used for irrigating vegetables, berries, low-growing fruits, or green corn intended to be used for human consumption; be it further

"Resolved, That sewage or sewage-polluted water may be used for irrigating vegetables or grains which are harvested in the dry state, such as beans, or vegetables, grains or alfalfa used exclusively as food for stock, with the exception that dairy cattle shall not be pastured on land under irrigation by sewage, or trees bearing fruits or nuts."

Reports of Operation of Sanitary Equipment.

The disregard in matters of health, and even decency, manifested in these instances is one more potent argument for often looking to some higher authority than the officials of the community for supervision of its sanitary interests.

It is becoming the policy of the bureau to demand reports of the operation not only of sewer farms, but sewage treatment works and disposal, water purification plants and swimming pools, and sanitary equipment generally. There are many excellent features in such a plan. It actually stimulates the operators to a keener observation of and a more personal interest in his plant, in an effort to constantly improve the showing. Further, it enables us to remain in more intimate and useful touch with the plant and the operator.

It is sometimes argued that the operator "fakes" the record. This may occasionally occur, but it is safe to say that such a practice will not go long undetected and it needs no argument that an operator who will "fake" a record is not a safe person to whom the health of the community can be entrusted. As requests are received, the bureau plans to cooperate in working out an efficient simple form of report suitable for the works in question.

SEWAGE DISPOSAL.

Applications for Permit Filed.

Hammonton, Hammon Engineering Company. To construct lateral sewers and interceptor serving the town of Hammonton, the sewage to be discharged into dredging ponds about 3,000 feet below town.

Permits Granted.

Hammonton, Hammon Engineering Company. To construct sewers and interceptor at Hammonton, as applied for.

Plans Filed.

Hammonton, Hammon Engineering Company. Plans and detailed report on proposed lateral sewers and interceptor.

Sanger. Sewerage and sewage disposal plans.

Los Gatos, Oaks Sanitarium. Revised plans of sewage disposal.

Investigations, Inspections, Reports and Conferences.

Yuba City, Sutter County Hospital. February 5. Inspection to recommend a sewage disposal for new hospital accommodating 50 persons. Advised use of septic tank and about 1,200 feet of subsurface tile.

Hammonton. February 6. Inspection to pass on sewerage improvement, including several lateral sewers and interceptor leading to abandoned dredger ponds below town. Available diluting water can be turned into sewer to control offensive conditions.

Marysville. February 6. Inspection of sewer farm for purpose of securing annual report. The farm appears to be excellently managed. Crops raised include hay, beans and Egyptian corn. The latter crop is regarded as an excellent crop for sewer farms as it stands a shortage or excess of sewage equally well.

Galt. February 15. Inspection to pass on proposed disposal of water and wash water from Utah Condenser plant into Dry Creek. Analysis of the wash water shows it to be putrescible and its disposal is therefore under the sewage disposal act. As it is not apparent that disposal, raw, will be an unqualified success, it was advised that the outfall be laid at as high a level as possible to facilitate treatment or land disposal, in case it becomes necessary to consider either.

San Jose. February 25. Conference with City Manager T. H. Reed and City Engineer Hunt regarding extensive improvements in sewage disposal. It was agreed that studies would be undertaken to gather essential design data preparatory to construction at the earliest date following return of normal conditions after the present national crisis.

Isleton. February 28. Inspection with a view to advising on sewage disposal for American quarters. Additional sewers endorsed and introduction of a septic tank to remove solids from sewage prior to disposal into drainage ditches in vicinity.

Benicia. February 25. Various conferences were held in connection with correction of insanitary conditions in Benicia, due to lack of comprehensive sewerage. The officials and the community are anxious to remedy the situation but are handicapped by the fact that the bonding capacity is limited.

Dillon Beach. February 27. Sanitary conditions are poor, due to lack of water. Two flush toilets in the hotel can not be flushed during part of the day. There are only two privies, one for men and one for women, to serve thirty cabins. Private houses use cesspools.

Cloverdale. February 28. An inspection was made of the sewer farm. Sewage is run out on top of the ground. It is soon absorbed and creates no nuisance. Evidences of the use of sewage to irrigate tomatoes, cabbage, cauliflower and lettuce were apparent.

Pasadena. February 4. Conference with city engineer relative to sewage treatment project. The lower court recently decided against Pasadena and in favor of Monterey Park the annexation suit on which has hinged the development of the proposed tricity sewer farm located within the boundaries of Monterey Park. The case will be taken to the Supreme Court at once and it is hoped to obtain a decision at an early date.

San Diego County Hospital. February 27. An addition to hospital for about 150 tuberculosis patients is under construction and disposal of sewage will necessitate the building of a treatment plant. Clarification in an Imhoff tank and final disposal by surface irrigation will probably solve the problem. Filters or subirrigation can be added later, if necessary.

San Diego Radio Station. February 27. Sewage from about 40 men is passed through a septic tank and then discharged on surface of ground in ravine near station. Odors have caused discomfort at the station but to no one else, as the station is isolated. Soil conditions do not favor irrigation or underground seepage. It will be necessary to pipe the effluent to a more remote point or else install a plant to better purify the sewage.

Camp Kearny. February 28. Obtained samples to determine bacterial efficiency of chlorination of septic tank effluent. Considerable odor has developed in vicinity of tank, but no one resides near enough to tank to be injured.

WATER SUPPLIES.

Applications for Permit Filed.

San Bernardino. To supply water from wells and Lytle Creek.

Laguna Cliffs, Laguna Cliffs Water Company. To supply water from well and spring.

Permits Granted.

San Bernardino. To supply water for domestic uses from Lytle Creek and existing wells on condition that the city shall post placards in Lytle Canyon warning the public against the pollution of Lytle Creek and that the water derived from this creek shall be disinfected at all times of year.

Watsonville, Watsonville Water Company. To continue to supply water to the inhabitants of Watsonville on condition that the supply shall be effectively chlorinated at all times and the ground water supplies shall be drawn upon sufficiently to insure a clear water or the surface supply shall be made clear by adequate filtration, at the option of the water company.

Plans Filed.

El Centro. Plans of proposed water filter.

Investigations, Inspections, Reports and Conferences.

Watsonville, Watsonville Water Company. February 18. Inspection of waterworks and watersheds in connection with action on application for permit. Water supply is a combination of a filtered and sterilized supply from inhabited watersheds and a well supply. Latter is used in time of freshets in the streams. It appears feasible, by manipulating the combination, to deliver a clear, safe water at all times. Granting permit was advised on condition that these results be consistently obtained.

Isleton, Golden State Asparagus Company. February 28. Inspection to advise on treating Sacramento River to make it safe and clear for drinking purposes. The company has already started work on a system to include a settling tank into which a small flow of filter alum and lime solution will be added as the river water is pumped in. After the impurities have coagulated and settled for 24 hours, the pump will draw off the clear water through a floating outlet and lift

it to an elevated surface tank. This is the same method as used at Byron Hot Springs and is capable of giving a very clear, remarkably safe water. It is adapted to the treatment of small quantities of water, say up to 20,000 gallons.

Hayward Heath. February 8. An investigation was made of the water supply at Hayward Heath. The supply is obtained from springs and creeks entirely within the drainage area of the unsewered populated district. The quantity of water is inadequate. Gross contamination exists in the supply. Chlorination was demanded.

Oakland, Industrial State Home for the Blind. February 18-28. An emergency hypochlorite treatment plant was set up to treat tunnel water on the property of the "Industrial State Home for the Blind." Supply is grossly contaminated. A chemical analysis of the water showed abnormally high amounts of organic matter in the form of nitrates and nitrites. It was found by experiment that the water absorbs 10 to 15 pounds of free chlorine per million gallons of water in a half-hour period. Both field work and laboratory experiments demonstrated that at least 7.5 pounds of available chlorine is required per million gallons of water to insure elimination of *B. coli*.

Santa Rosa, MacDonald Water Company. February 2 and 3. Another test, extending over 24 hours, was run on the chlorinator at the reservoir. The machine maintained a uniform feed, although the outside temperature varied about thirty degrees during the test.

Reinspection on February 28. Chlorine dose found to be too small and immediately increased. Inspection was made of places just above the intake on Santa Rosa Creek, in company with District Health Officer Gillihan. Instructions were given to tenants to lessen pollution of the creek by surface seepage from manure piles, etc.

Benicia, Benicia Water Company. February 25. The chlorinator of this company is still not in use, due to delay by the manufacturer in replacing certain defective parts.

Healdsburg. February 28. An inspection was made of the Healdsburg water supply. The covers of the two large wells near the Russian River have been made water-tight in anticipation of a possible flooding at high river stage.

Oakland, Berkeley and Alameda. February 4, 21 and 22. Sampling continued of the various sources of the East Bay Water Company supplies.

Dillon Beach. February 27. The water supply for this resort is obtained from a tunnel dug in the hills back of the place. Water is piped to a 7,500-gallon reservoir near the hotel. From this reservoir water is piped to the hotel and cottages. The flow is about 4,500 gallons a day. During the height of the season this is not enough and it is said that even the toilets can not be flushed, resulting in most insanitary conditions.

Los Angeles. February 13. Trip to Franklin Canyon to obtain samples of Owens River water supply.

Oceanside. February 28. Collected samples of Oceanside water supply.

SPECIAL GARBAGE DISPOSAL INVESTIGATION.

San Mateo County. February 4. An inspection was made of a piggery located on Seal Creek in the marsh lands near San Mateo. Garbage is obtained from Camp Fremont and the surrounding community. Premises are unnecessarily filthy. Drainage conditions are particularly bad. However, there is no apparent menace to public health. Recommendations were made chiefly to improve drainage and minimize the fly menace.

SWIMMING POOLS.

Applications for Permit Filed.

Pasadena. Commissioner of Public Works, to operate Brookside Park Baths.

Sequoia Resort, Napa. To operate Sequoia Resort Baths.

San Jose. To operate Alum Rock Park Baths.

San Jose, The Vendome Hotel Co. To operate Vendome Plunge.

Temporary Permits Granted.

Pending investigation, temporary permits have been granted to operate the above named pools.

Plans Filed.

San Francisco, Young Women's Christian Association. Plans of proposed swimming pool.

LABORATORY WORK.**Los Angeles Office:**

Bacteriological examinations of water-----	76
Bacteriological examination of sewage-----	3

Berkeley Office:

Bacteriological examinations of water-----	441
Chemical examinations of water (partial)-----	445
Special bacteriological examinations of water-----	15
Sanitary chemical examinations of water-----	3
Chemical examinations of trade wastes-----	6

**REPORT OF THE BUREAU OF FOODS AND DRUGS FOR
FEBRUARY, 1918.**

E. J. LEA, M.S., Director.

Two hundred and six samples of foods, drugs and miscellaneous materials were received at the laboratory during the month of February.

One hundred and twenty-nine samples were officially collected by our inspectors and consisted of bouillon cubes, camphorated oil, candy, chocolate, condiments, coriander seed, cream, eggs, egg substitutes, extracts, figs, fish, gelantine, honey, liquors, meats, milk, noodles, olive oil, spirits of camphor, sweet spirits of nitre, syrups, tincture of iodine, vegetables and vinegar.

Forty-two unofficial samples were submitted to the laboratory, consisting of butter, catsup, cornmeal, chewing gum, dried egg, egg substitute, fish, flour, liquors, meat, milk, oil, prunes, sugar, vegetables, vinegar, walnut meats and waste from a refinery.

The state institution samples numbered 35 this month and consisted of butter, chocolate, cocoa, extracts, flour, frankfurters, spices, vegetables and vinegar.

ARTICLES OF FOOD CONDEMNED.

The following articles of food, condemned upon physical and chemical examination as unfit for food, were either destroyed or denatured during the month of February, 1918: Apple butter, 14 8-ounce jars, old, fermented, Nevada City; bacon, sliced, 18 ounces, old, decomposed, Berkeley; dried figs, 15 pounds, wormy, Berkeley; herring, 3 8-ounce tins, decomposed, Nevada City; potatoes, 11,900 pounds, scabby and black rotted, Nevada City; salmon, 8 ounces, old, decomposed, Berkeley; salmon loaf, 40 6-ounce cans, old, decomposed, Berkeley; sardines, 8 4-ounce tins, decomposed, Nevada City; sauce, 25 $\frac{3}{4}$ dozen 6-ounce bottles, decomposed, Los Angeles.

**CONVICTIONS UNDER FOODS AND DRUGS ACTS, REPORTED
DURING FEBRUARY, 1918.**

Absinthe, adulterated, E. S. Roberts, Milpitas, fined \$25. The following were adulterated and mislabeled: Chili sauce, Sassarni Grocery Co., Truckee, fined \$10; chopped meat, H. Hertzbrun, San Diego, fined \$25; Cinzano Vermouth, L. Cortopassi & Son & Bertolucci, Colfax, fined \$15; eggs, Swift & Co., Oakland, fined \$10; eggs, American Creamery Co., Oakland, fined \$25; Fernet-Branca, A. Belluomini, Colfax, fined \$5; frankfurters, Annasohn & Boltz, San Francisco, fined \$50; gin, P. Jos. Lynch, Petaluma, fined \$5; gin, A. J. Tanner, Petaluma, fined \$5; gin, Gladstone Liquor House, San Mateo, fined \$25; gin, P. Franzine, Truckee, fined \$5; gin, Frank Ferrari, Truckee, fined \$5; gin, Chas. Hope, Truckee, fined \$5; milk, Paul Marcucci, Santa Rosa, fined \$5; molasses, Cleveland & Schurmann, Santa Rosa, fined \$5; oleomargarine, Justin Hammond, San Diego, fined \$25; peppermint, essence of, Benj.

Schnier, San Francisco, O. R. 6 months; raspberry syrup, G. Malatesta, San Jose, fined \$25; strawberry shortcake, John Christ, Reception Cafe, Berkeley, fined \$25; tomato catsup, A. Soracco, San Francisco, fined \$25; tomato puree, Standard Canning Co., San Diego, fined \$50.

CASES REFERRED TO DISTRICT ATTORNEYS.

Forty-eight cases of violations of the Pure Foods and Drugs Acts were referred to district attorneys for prosecution. These cases included corned beef which was filthy and decomposed; butter fat for which other materials than butter had been substituted; coffee containing figs which fact was not declared on the label; cream which consisted of milk; eggs sold as "fresh" which were old and stale and in some cases rotten; egg substitutes which were adulterated and mislabeled; extracts in which other materials had been substituted for the flavors claimed; liquors of a cheap and inferior character substituted for high grade material; hair tonics which were mislabeled, claims being false and exaggerated; milk adulterated with water; lemon oil containing no lemon; dried peaches consisting of filthy material, mostly culls; pie filling labeled "lemon" made from imitation materials; raspberry drops artificially colored and flavored; cheap inferior product dispensed in Lea & Perrin's Worcestershire sauce bottles; pork sausage containing the prohibited preservative—sulfur dioxid; sugar sold as "pure maple" containing no maple whatever; syrups, for fountain use, artificially flavored and colored, such fact not being declared; tomato products adulterated and mislabeled being made from filthy, decomposed material; vinegar below standard and walnuts which were moldy, wormy and decomposed.

The dealers and manufacturers referred were as follows: *Crockett*, Louis Sarres. *Fairfield*, John Cadenasso. *Healdsburg*, Enterprise Canning Company. *Los Angeles*, Joe Lowe Company, on three counts; Gertrude Katzfey, Standard Equipment Company. *Martinez*, John Contorines, James Stathakis. *Mountain View*, Sanguinetti Canning Company, on two counts. *Oakland*, Yow Sang & Co., Berlin Restaurant, Poppy Butter Company, Vogel & Poole, proprietors; S. Rosenthal, on two counts; Kwong Chong Wo & Co., Toscano Restaurant, F. S. Lewin, Pete's Fashion Restaurant, Atlas Cafe, Pacific Coast Canning Company. *San Francisco*, Empire Free Market, Island Samos Restaurant, Kohn-Boldeman Company, Sanaderma Toilet Products Co., Weinstein's, A. H. Landsberger, Reed Pickle Works, on two counts; Nardi Bros. & Co., Italian American Canning Company, Fleischman Company, G. Legakes. *San Diego*, Fox Coffee Store, E. Moulie, Clark & Wenz, Baldessary & Corazza, Giovanni Busco, San Diego Relish Company. *San Jose*, Gerome Tripoli, Aiello Bros. *Suisun*, Winters Canning Company, on five counts. *Sunnyvale*, Sunnyvale Canneries.

The following Notices of Judgment have been received from the Department of Agriculture, Washington, D. C. Copies of these judgments may be obtained by writing the Superintendent of Documents, Government Printing Office, Washington, D. C., at 10 cents per copy.

	N. J. No.		N. J. No.
Apples, evaporated:		Blood balm. <i>See</i> Balm.	
Appleby Bros. -----	5032	Blood sirup. <i>See</i> Sirup.	
Hamilton, W. J. -----	5036	Botanic blood balm:	
Hamilton, A. C. & Co. -----	5054	Warner, William R., & Co.	5022
Ladd Bros. -----	5033	Boxenbaum discovery:	
Simpson-Minton Co. -----	5053	Boxenbaum, Son & Co.	5089
Teasdale, J. W., & Co. -----	5055	Bran. <i>See</i> Feed.	
Balm, botanic blood:		Brandy, cognac:	
Warner, William R., & Co.	5022	Rosenthal, S. & Co.	5057
Baur's diamond brand bromids:		cognac, fine old:	
Liquid Carbonic Co.	5035	Universal Mfg. Bitters Co.	5070
Beans:		cognac type:	
Armada Elevator Co.	5066	Universal Mfg. Bitters Co.	5070
Carr, H. W., & Co., 5062, 5064, 5075		Bromids, Baur's diamond brand:	
Jessup, G. L.	5090	Liquid Carbonic Co.	5035
pork and:		Cane sirup. <i>See</i> Sirup.	
Oceana Canning Co.	5059, 5092	Catsup. <i>See</i> Ketchup.	
Sycamore Preserve Works	5099	Celery compound. <i>See</i> Compound.	
Wisconsin Pea Cannery Co.	5095	Cider, sweet:	
pork and, with tomato sauce:		Tip Top Bottling Co.	5069
Hart Bros.	5097	wild cherry:	
Wisconsin Pea Cannery Co.	5095	Star Bottling & Manufacturing	
red kidney:		Co.	5077
Hamilton, W., & Son -----	5091	Cocaine hydrochlor:	
with tomato sauce:		Diamond Pharmacal Co.	5039
Sycamore Preserve Works	5088	Cognac. <i>See</i> Brandy.	
Birch, oil of. <i>See</i> Oil.		Cognac-brandy essence. <i>See</i> Extract.	
Bitters, fernet:		Cognac type brandy. <i>See</i> Brandy.	
Puziello, Luccaro & Co.	5094	Compound,	
ferro-china:		gravel root:	
Martino, M.	5098	Gilbert, T. H., Drug Co.	5025
Bitters, fernet-branca:		Paine's celery:	
Alba Wine Co.	5050	Wells & Richardson Co.	5021

	N. J. No.		N. J. No.
Compound catsup. <i>See</i> Tomato ketchup, compound.		Indian blood sirup. <i>See</i> Sirup.	
Cottonseed meal. <i>See</i> Feed.		Iodin, tincture. <i>See</i> Tincture.	
Compound, vanilla. <i>See</i> Extract.		Jam:	
Cottonseed meal. <i>See</i> Feed.		Rothschild, John, & Co.-----	5056
Cough sirup. <i>See</i> Sirup.		Johnson's, Dr. Clark, Indian blood sirup:	
Cough and Consumption remedy, S. B. <i>See</i> Remedy.		Hoeschler Bros. -----	5018
Cow tonic. <i>See</i> Tonic.		Ketchup. <i>See</i> Tomato ketchup.	
Creme de apricot:		Ketchup, tomato. <i>See</i> Tomato ketchup.	
Martino, M. -----	5098	Lafayette cough sirup:	
de menthe essence. <i>See</i> Extract.		Lafayette Co. -----	5024
Cromer, J. M. -----	5009	Liniment, soap:	
Fuher, W. L. -----	5017	Berkeley, C. F. -----	5042
Mainhart, C. C. -----	5004, 5005	Jackson & Whipps -----	5043
Ohio & Pittsburg Milk Co. -----	5020	Macaroni:	
Pilcher, T. C. -----	5003	Gioia, Bellanca & Co. -----	5082
Popkins, R. N. -----	5010	Malt sprouts. <i>See</i> Feed.	
Stup, A. P. -----	5006	Manna rice special chick feed. <i>See</i> Feed.	
Stup, M. F. -----	5007	Manna superb chick feed. <i>See</i> Feed.	
Diamond brand bromids. <i>See</i> Bromids.		Maiteca:	
Eggs:		Edible Products Co. -----	5049
Whitfield, J. A., Co. -----	5002	Maple sugar. <i>See</i> Sugar.	
desiccated:		Meal. <i>See</i> Feed.	
Lamont, C. F. -----	5031	Microbe killer:	
Eggs, frozen:		Radams, Wm., Chemical Co. ---	5029
Perfection Egg Co. -----	5065	Milk:	
Evaporated apples. <i>See</i> Apples.		Ayers, S. E. -----	5008
Extract, fluid, for mistra' vegetal compound:		Bell, T. L. -----	5012
Valsecchi, Antonio -----	5038	Mistra' vegetal compound, fluid extract:	
Extract, cognac-brandy:		Valsecchi, Antonio -----	5038
Valsecchi, A. -----	5060	Molasses fat maker. <i>See</i> Feed.	
creme de menthe:		National cow tonic. <i>See</i> Tonic.	
Valsecchi, A. -----	5087	National hog remedy. <i>See</i> Remedy.	
vanilla:		Niter, sweet spirits of:	
Hickok, J. N., & Son -----	5093	Jackson & Whipps -----	5043
Feed, cottonseed meal:		Oats. <i>See</i> Feed.	
Bartlett Co. -----	5048	Oil of birch:	
Buckeye Cotton Oil Co. -----	5081	New York Rackett Store -----	5072
Smith, W. N. -----	5001	Orangeade:	
malt sprouts:		Star Bottling & Manufacturing Co. -----	5077
Foedtert Malting Co. -----	5068	Owen's wonderful sore wash:	
gem scratch:		Sore Wash and Eye Lotion Co. ---	5023
Edgar-Morgan Co. -----	5034	Oysters:	
manna rice special chick:		Dewing, M., Co. -----	5044
Edgar-Morgan Co. -----	5034	Diggs, Jerome -----	5051
manna superb chick:		Rocky Point Oysters Co. -----	5045, 5046
Edgar-Morgan Co. -----	5034	Pain remedy. <i>See</i> Remedy.	
molasses fat maker:		Paine's celery compound:	
American Milling Co. -----	5030	Wells & Richardson Co. -----	5021
oats:		Paregoric:	
Mayo Milling Co. -----	5011	Berkeley, C. F. -----	5042
wheat bran:		Coblentz Pharmacy -----	5041
Hunter-Robinson-Wenz Milling Co. -----	5026	Jackson & Whipps -----	5043
Fernet. <i>See</i> Bitters.		Pie and tart filler. <i>See</i> Filler.	
Fernet-branca. <i>See</i> Bitters.		Pork and beans. <i>See</i> Beans.	
Ferro-china bitters. <i>See</i> Bitters.		Prescription, physician's:	
Filler, pie and tart:		O'Donnell's Pharmacy -----	5019
Sunlit Fruit Co. -----	5067	Pure northern Ohio sugar. <i>See</i> Sugar.	
Fine old cognac. <i>See</i> Brandy.		Radams microbe killer:	
Fish, sardines:		Radams, Wm., Chemical Co. ---	5029
Seacoast Canning Co. -----	5058	Remedy, S. B. cough and consumption:	
Fluid extract for mistra' vegetal compound. <i>See</i> Extract.		Blumauer Frank Drug Co. ---	5063
Frozen eggs. <i>See</i> Eggs.		Remedy, pain:	
Gem scratch feed. <i>See</i> Feed.		Hite, S. P. Co. -----	5015
Gilbert's gravel root compound:		hog:	
Gilbert, T. H., Drug Co. -----	5025	National Breeders Co. -----	5016
Gowan's preparation:		rheumatic:	
Gowan Medical Co. -----	5084	Strange, H. M. -----	5028
Grape juice:		Rheumatic remedy. <i>See</i> Remedy.	
Theonett & Co. -----	5061	Sardines. <i>See</i> Fish.	
Gravel root compound. <i>See</i> Compound.		Scallops:	
Hampton Springs Water. <i>See</i> Water.		Jackson Fish Co. -----	5013
Heroin and terpin hydrate:		Mears, A. H. G. -----	5014
Diamond Pharmacal Co. -----	5039	Morehead City Sea Food Co. ---	5013
Heroin hydrochl:		Sirup, cough:	
Diamond Pharmacal Co. -----	5039	Lafayette Co. -----	5024
Hite's pain remedy:		Indian blood:	
Hite, S. P. Co. -----	5015	Hoeschler Bros. -----	5018
Hog remedy. <i>See</i> Remedy.		Sirup, cane:	
		Georgia Cane Product Co. -----	5078
		Soap liniment. <i>See</i> Liniment.	

	N. J. No.		N. J. No.
Soda, strawberry:		Tomatoes, strained:	
Tip Top Bottling Co.-----	5069	Fort Stanwix Canning Co.-----	5027
Sore wash. <i>See</i> Wash.		Tonic, cow:	
Spirits of turpentine. <i>See</i> Turpentine.		National Breeders Co.-----	5016
Stock, tomato. <i>See</i> Tomato stock.		Turpentine, spirits of:	
Strange's rheumatic remedy:		Dill Medicine Co.-----	5083
Strange, H. M.-----	5028	Urol:	
Strawberry soda. <i>See</i> Soda.		Standard Chemical Co.-----	5085
Sweet spirits of niter:		Vanilla. <i>See</i> Extract.	
Jackson & Whipps-----	5043	Vinegar:	
Sweet cider. <i>See</i> Cider.		Gist-Leo Vinegar Co.-----	5086
Sugar, maple:		Kuehne, Otto, Preserving Co.	
Northern Ohio Sirup & Manu-		-----	5079, 5080
facturing Co.-----	5052	McLean, Wallace, Vinegar Co.	5096
S. B. cough and consumption remedy:		Price & Lucas Cider & Vinegar	
Blumauer Frank Drug Co.---	5063	Co.-----	5076
Tincture iodine:		Wash, sore, Owen's wonderful:	
O'Donnell's Pharmacy -----	5019	Sore Wash and Eye Lotion Co.	5023
Tomato ketchup:		Water, Hampton Springs:	
Colter, A. W., Canning Co.---	5047	Hampton Springs Co.-----	5100
stock:		Wheat bran. <i>See</i> Feed.	
Greenabaum & Bros.-----	5040	Wild cherry cider. <i>See</i> Cider.	
Lewis Packing Co.-----	5071	Wine:	
ketchup, compound:		Catalano, Cosimo -----	5037
Harbauer Co.-----	5074		
pulp:			
Hartlove Packing Co.-----	5073		

REPORT OF THE BUREAU OF REGISTRATION OF NURSES FOR FEBRUARY, 1918.

ANNA C. JAMMÉ, R.N., Director.

During February an examination of applicants for certificate as registered nurse was held in Sacramento, San Francisco and Los Angeles; 210 applicants presented themselves for this examination. The number of nurses taking these examinations is steadily increasing and, although an examination was held in August and October of 1917 aggregating 393 applicants, the recent examination following so shortly is expressive of the increasing number of graduates of accredited schools in this state.

The urgent need of augmenting our supply of nurses for our National Nursing Army is a question of grave consideration occupying the bureau at this moment. Every effort is being put forth to urge the schools for nurses to increase their facilities in order that more nurses may be encouraged to take the course of instruction.

By increased facilities is meant adequate and better housing conditions, a better level of education, opportunity for elective study in the latter part of the third year, a just and equitable method of student control, elimination of duties that do not pertain to a nurse's training but, rightly, to the domestic service of the hospital. The policy heretofore carried out in regard to schools of nursing has, on the whole, not been correct, and now in this great crisis we see the ineffectiveness of methods controlled by such policy. The matter of the training of nurses is now taking on a wholly different aspect and enlisting the attention of many people outside the immediate surroundings of the hospital. Energetic measures are being used by the National Council of Defense and the Committee on Nursing of the General Medical Board to bring about in this country a better standard of conditions under which nurses receive their training, which will encourage young women to take up the work, not only as war service, but as a permanent and satisfying profession.

In an interesting pamphlet sent by the Committee on Nursing on National Preparedness in Nursing, discussion of the problem is open thus: "It has always been a little difficult to make the general public realize how vitally important the work of the nurse has become in our national economy, and how essential it is that we should have for our many forms of community health service a very much larger body of well trained nurses. The war has made us see through the vivid and symbolical figure of the war nurse the part which this profession is playing and must increasingly play in conserving the life blood of our people. It has shown us that our country leans just as heavily on its trained army of life savers as on its battalions of fighters, and that the recruiting and training of an adequate nursing force is just as essential to the ultimate success of our war aims as the preparation of any other branch of the army and navy service."

In this state some decided advance has been made in increased enrollment and educational status of students as the following table will show:

Year	Students enrolled	Grammar school	High school, 1-2-3 years	High school graduates	Normal school	Colleges
1916 -----	2,592	463	1,130	973	11	15
1917 -----	2,771	367	1,189	1,191	5	19

Even with this increase we are not yet up to our capacity and not a few schools report shortage. This is in some measure due to present condition of women's work, whereby many more opportunities are open to young girls, also to the length of the nursing course and unsatisfactory conditions under which nurses in many cases receive their training. We are, however, finding that a number of schools are up to their capacity and this no less in the small town or rural communities than in the cities, but we do find where there is wholesome discipline, a dignified method of student control, arrangement of practice work in accordance with the requirements of a nurse's course and suitable living conditions, that in such schools there is steadily maintained a good attendance of students and a waiting list of applicants.

One of the great obstacles the woman of serious purpose and good education encounters is a low standard of requirements for admission and the length of the practical course. In the former instance she has had to take instruction along with the nurse of grammar, or even lower, grades. Credit for suitable preparatory work has never been given and the student with a proper scientific preparation has had to follow in the same road as the one with no preparation. The length of the course in many schools has been excessive for what the school has to offer, and there has been undue repetition of work exacted which is of nonessential value to a nurse.

In California the plan of reducing the amount of practice work has already been accepted and is now under way at the universities of Stanford and California. The work given in the high school as preparatory to the regular nurses' course will also aid very greatly in determining the length of the practical course. Much can be done in the high school which has taken the student's time during the first six months, or year. The high school with its well-equipped class rooms, laboratories, and teachers is well fitted to give this preliminary instruction, while the nursing school which is not an endowed institution and depends on the hospital for its financial support is in no way able to offer what the high school can. Such introductory sciences as chemistry, biology, anatomy and physiology, hygiene, nutrition and cookery, can be introduced in the third and four year program of the high school girl, and even if she should not go forward into nursing, she has at least some mastery of the "Arts of Life." With such preparation as may be given in the high school we will be able to release time in the third year for the elective study and push forward more rapidly nurses who will be capable of taking responsible and remunerative positions.

It may well be said that in this work of the training and education of nurses we stand today at the parting of the ways, one direction leading to greater opportunities, not only for the production of more nurses, but the production of a better qualified woman for the work that is now at hand; in the other direction lessened production and an adherence to methods that do not favor the growth or advancement of the student.

LIST OF COUNTY AND CITY HEALTH OFFICERS.

Alameda County—
 Dr. J. Hal Cope.....Pleasanton
 Alameda.....Dr. A. Hieronymus
 Albany.....Dr. J. F. Diddle
 Berkeley.....Dr. J. J. Benton
 Emeryville.....Dr. A. T. Drennan
 Hayward.....Dr. F. W. Browning
 Livermore.....Dr. J. K. Warner
 Oakland.....Dr. Kirby B. Smith
 Piedmont.....Dr. Benj. T. Mouser
 Pleasanton.....Dr. J. Hal Cope
 San Leandro.....Dr. Luther Michael
 Alpine County—
 Mr. Fred S. Dunlap.....Markleeville
 Amador County—
 Dr. G. L. Lynch.....Amador City
 Jackson.....H. E. Kay
 Plymouth.....W. J. Ninnis
 Sutter Creek.....W. A. Burres
 Butte County—
 Dr. L. L. Thompson.....Gridley
 Biggs.....R. W. Simmons
 Chico.....W. H. Marshall
 Gridley.....Dr. L. Q. Thompson
 Oroville.....Dr. W. F. Gates
 Calaveras County—
 Dr. George F. Pache, Angels Camp
 Angels Camp.....Dr. E. W. Weirich
 Colusa County—
 Dr. G. W. Desrosier.....Colusa
 Colusa.....Dr. G. W. Desrosier
 Contra Costa County—
 Dr. W. S. George.....Antioch
 Antioch.....Dr. W. S. George
 Concord.....Dr. F. F. Neff
 El Cerrito.....Dr. J. F. Diddle
 Hercules.....Dr. C. T. Wetmore
 Martinez.....Dr. Edwin Merrithew
 Pinole.....Dr. M. L. Fernandez
 Pittsburg.....Dr. H. E. Peters
 Richmond.....Dr. Chas. R. Blake
 Walnut Creek.....Dr. C. R. Leech
 Del Norte County—
 Dr. E. M. Fine.....Crescent City
 Crescent City.....Dr. E. M. Fine
 El Dorado County—
 Dr. S. H. Rantz.....Placerville
 Placerville.....G. H. Wickes
 Fresno County—
 Dr. G. L. Long.....Fresno
 Clovis.....Dr. M. S. McMurtry
 Coalinga.....Dr. C. W. Hutchison
 Firebaugh.....Dr. H. J. Greven
 Fowler.....Chas. Chapman
 Fresno.....Dr. C. Mathewson
 Kingsburg.....Dr. J. A. Gillespie
 Reedley.....Dr. Chas. H. Traber
 Sanger.....Dr. Thos. F. Madden
 Selma.....Dr. Fred H. Williams
 Glenn County—
 Dr. F. M. Lawson.....Willows
 Orland.....Dr. S. Igllick
 Willows.....Dr. W. H. Walker
 Humboldt County—
 Dr. Joseph Walsh.....Eureka
 Arcata.....Dr. G. W. McKinnon
 Blue Lake.....Dr. Earl W. Hill
 Eureka.....Dr. L. A. Wing
 Ferndale.....Dr. A. P. Griffin
 Fortuna.....Dr. Orville Rockwell
 Imperial County—
 Dr. R. K. McGuffin.....Imperial
 Brawley.....Dr. Eugene Le Baron
 Calexico.....Dr. P. N. Sims
 El Centro.....Dr. F. A. Burger
 Holtville.....C. A. Johnston
 Imperial.....Dr. R. K. McGuffin
 Inyo County—
 Dr. I. J. Woodin.....Independence
 Bishop.....John B. Clarke
 Kern County—
 Dr. C. A. Morris.....Bakersfield
 Bakersfield.....Dr. P. J. Cuneo
 Delano.....Dr. J. R. Hicks
 Maricopa.....Dr. H. N. Taylor
 McKittrick.....Dr. Robert C. Dear
 Taft.....Dr. E. A. D. Jones
 Tehachapi.....Dr. N. J. Brown, Jr.

Kings County—
 Dr. C. L. Scott.....Hanford
 Corcoran.....Dr. J. T. Peery
 Hanford.....Dr. B. Robbins
 Lemoore.....Dr. W. P. Byron
 Lake County—
 Dr. A. N. Craig.....Kelseyville
 Lakeport.....P. H. Millberry
 Lassen County—
 Dr. W. E. Dozier.....Susanville
 Susanville.....Dr. F. D. Walsh
 Los Angeles County—
 Dr. J. L. Pomeroy.....Los Angeles
 Alhambra.....Dr. F. E. Corey
 Arcadia.....Dr. Chas. D. Gaylord
 Avalon.....Dr. J. J. Peckham
 Azusa.....Dr. John E. Hill
 Beverly Hills.....Dr. Oscar H. Mueller
 Burbank.....Dr. E. H. Thompson
 Claremont.....Dr. A. V. Stoughton
 Compton.....E. E. Elliot
 Covina.....
 Culver City.....
 Eagle Rock.....Dr. C. H. Phinney
 El Monte.....Dr. S. L. Corpe
 El Segundo.....R. F. Davis
 Glendale.....Dr. R. E. Chase
 Glendora.....Dr. L. N. Suydam
 Hermosa Beach.....B. F. Brown
 Huntington Park.....Dr. W. Thompson
 Inglewood.....Dr. W. W. Reber
 La Verne.....Dr. J. E. Hubble
 Long Beach.....Dr. R. L. Taylor
 Los Angeles.....Dr. L. M. Powers
 Manhattan Beach.....Llewellyn Price
 Monrovia.....Dr. Chas. D. Gaylord
 Monterey Park.....Dr. J. S. Trehwella
 Pasadena.....Dr. Stanley P. Black
 Pomona.....Dr. N. J. Rice
 Redondo Beach.....Dr. D. R. Hancock
 San Fernando.....Dr. Benj. B. Ward
 San Gabriel.....Dr. Wm. W. Worster
 San Marino.....Dr. W. LeMoyne Wills
 Santa Monica.....Dr. F. J. Wagner
 Sawtelle.....Dr. A. B. Hromadka
 Sierra Madre.....Dr. R. H. Mackerras
 South Pasadena.....Dr. C. F. Metcalf
 Venice.....Dr. W. M. Kendall
 Vernon.....Dr. L. J. Williams
 Watts.....Dr. E. J. Riche
 Whittier.....Dr. W. H. Stokes
 Madera County—
 Dr. L. St. John Hely.....Madera
 Madera.....Dr. L. St. John Hely
 Marin County—
 Dr. J. H. Kuser.....Novato
 Belvedere.....Dr. Florence Scott
 Corte Madera.....
 Larkspur.....J. R. McGuffick
 Mill Valley.....James V. Chase
 Ross.....Dr. Thos. U. Smith
 San Anselmo.....Dr. O. W. Jones
 San Rafael.....Dr. W. F. Jones
 Sausalito.....Dr. Allen H. Vance
 Mariposa County—
 Dr. F. L. Wright.....Mariposa
 Mendocino County—
 Dr. S. L. Rea.....Ukiah
 Fort Bragg.....Dr. L. C. Gregory
 Point Arena.....Conrad Nicks
 Potter Valley.....W. T. Eddie
 Ukiah.....Dr. Lew K. Van Allen
 Willits.....Dr. F. C. Gunn
 Merced County—
 Dr. J. L. Mudd.....Merced
 Gustine.....Dr. C. E. Stagner
 Los Banos.....Dr. R. Jadarola
 Merced.....Dr. H. Kylberg
 Modoc County—
 Dr. H. B. Ehle.....Alturas
 Alturas.....Dr. Jahn Stile
 Mono County—
 Dr. C. W. Wood.....Bridgeport
 Monterey County—
 Dr. J. A. Beck.....Salinas
 Carmel-by-the-Sea.....J. F. Beardsley
 King City.....Dr. D. Brumwell
 Monterey.....C. A. Kiernan
 Pacific Grove.....James P. Evans
 Salinas.....W. E. Hallock

LIST OF COUNTY AND CITY HEALTH OFFICERS—Continued.

Napa County—		Santa Cruz County—	
Dr. O. T. Schulze	Napa	Dr. Wm. H. Keck	Santa Cruz
Calistoga	L. Randall	Santa Cruz	Dr. A. N. Nittler
Napa	Alex. Hull	Watsonville	Dr. F. H. Koepke
St. Helena	J. G. Johnson	Santa Clara County—	
Nevada County—		Dr. Wm. Simpson	San Jose
Dr. Carl P. Jones	Grass Valley	Alviso	Dr. J. I. Beattie
Grass Valley	Dr. G. E. Chappell	Gilroy	Dr. J. W. Thayer
Nevada City	Geo. H. Calanan	Los Gatos	Dr. R. S. Anthony
Orange County—		Mayfield	Joseph Ponce
Dr. A. H. Domann	Santa Ana	Morgan Hill	Dr. W. D. Miner
Anaheim	Dr. J. W. Truxaw	Mountain View	Dr. A. H. MacFarlane
Brea	Dr. W. W. Davis	Palo Alto	Louis Olson
Fullerton	Dr. J. H. Lang	San Jose	Dr. D. A. Beattie
Huntington Beach	Dr. G. A. Shank	Santa Clara	Dr. G. W. Fowler
Newport Beach	J. A. Porter	Sunnyvale	Mrs. Norman Schofield
Orange	Dr. F. L. Chapline	Shasta County—	
Santa Ana	Dr. J. I. Clark	Dr. S. T. White	Redding
Seal Beach	Dr. J. Park Dougall	Coram	
Stanton	J. H. Swan	Kennett	Dr. J. P. Sandholt
Placer County—		Redding	E. A. Rolison
Dr. John Manson	Lincoln	Sierra County—	
Auburn	Dr. A. N. Couture	Dr. O. A. Eckhardt	Downieville
Colfax	Dr. R. A. Peers	Loyalton	B. M. Wheeler
Lincoln	F. R. Elder	Siskiyou County—	
Rocklin	Wm. H. Keeley	Dr. W. F. Shaw	Yreka
Roseville	G. W. Lohse	Dorris	Dr. A. A. Atkinson
Plumas County—		Dunsmuir	Herman Woodward
Dr. B. J. Lasswell	Quincy	Etna	Dr. W. H. Haines
Riverside County—		Fort Jones	S. R. Taylor
Dr. James G. Baird	Riverside	Montague	Hugh W. French
Banning	Dr. L. M. Ryan	Sisson	Dr. Paul Wright
Beaumont	Dr. F. D. West	Yreka	Dr. W. F. Shaw
Blythe	Dr. W. H. Chapman	Solano County—	
Corona	Dr. W. S. Davis	Dr. W. C. Jenney	Vacaville
Elsinore	Dr. G. E. Shank	Benicia	Dr. P. B. Fry
Hemet	Dr. H. O. Miller	Dixon	John C. Benson
Perris	Dr. J. W. Reese	Fairfield	F. L. Morrill
Riverside	Dr. G. W. Girdlestone	Rio Vista	Dr. Albert F. Welin
San Jacinto	Charles Y. Adams	Suisun	Dr. A. G. Bailey
Sacramento County—		Vacaville	W. F. Hughes
Dr. J. H. Leimbach	Isleton	Vallejo	Dr. E. A. Peterson
Sacramento	Dr. W. J. Hanna	Sonoma County—	
San Benito County—		Dr. F. O. Pryor	Santa Rosa
Dr. J. M. O'Donnell	Hollister	Cloverdale	E. E. Gibbons
Hollister	Dr. J. M. O'Donnell	Healdsburg	Dr. J. W. Seawell
San Juan	Joseph De Lucchi	Petaluma	Dr. R. B. Duncan
San Bernardino County—		Santa Rosa	Dr. Jackson Temple
Dr. L. M. Coy	San Bernardino	Sebastopol	Dr. James P. Miller
Chino	Dr. Elgar Reed	Sonoma	J. H. Albertson
Colton	Dr. J. A. Champion	Stanislaus County—	
Needles	Dr. A. S. Parker	Dr. J. L. Hennemuth	Modesto
Ontario	Dr. Calvert L. Emmons	Modesto	Dr. J. W. Morgan
Redlands	Dr. F. H. Folkins	Newman	Dr. H. V. Armistead
Rialto	Dr. L. P. Barbour	Oakdale	Dr. F. W. McKibbin
San Bernardino	Dr. F. M. Gardner	Turlock	Dr. G. L. Wilson
Upland	E. R. Bowman	Sutter County—	
San Diego County—		Dr. I. W. Higgins	Live Oak
Dr. Otto G. Marsh	San Diego	Yuba City	Dr. J. H. Barr
Chula Vista	Dr. G. E. Fuller	Tehama County—	
Coronado	Dr. Raffael Lorini	Dr. E. E. Thompson	Red Bluff
East San Diego	Dr. C. R. Carpenter	Corning	Dr. O. F. Rudolph
El Cajon	Dr. Chas. R. Knox	Red Bluff	Dr. Walter Gavey
Escondido	Dr. B. L. Crise	Tehama	Dr. Mary B. Poket
La Mesa	Dr. L. W. Zochert	Trinity County—	
National City	Dr. C. S. Owen	Dr. F. H. Bly	Weaverville
Oceanside	Dr. R. S. Reid	Tulare County—	
San Diego	Dr. E. P. Chartres-Martin	Dr. A. W. Preston	Visalia
San Francisco (city and county)—		Dinuba	Dr. A. N. Loper
Dr. W. C. Hassler	San Francisco	Exeter	Dr. J. F. Dungan
San Joaquin County—		Lindsay	Dr. C. W. Locke
Dr. John T. Davison	Stockton	Porterville	Dr. H. A. Todd
Lodi	Dr. S. W. Hopkins	Tulare	Dr. J. B. Rosson
Stockton	Dr. Linwood Dozier	Visalia	Dr. A. W. Preston
Tracy	Dr. J. G. Murrell	Tuolumne County—	
San Luis Obispo County—		Dr. Wm. L. Hood	Sonora
Dr. C. J. McGovern	San Luis Obispo	Sonora	Dr. G. C. Wrigley
Arroyo Grande	Dr. H. A. Gallup	Ventura County—	
Paso Robles	T. A. Hurley	Dr. A. A. Maulhardt	Oxnard
San Luis Obispo	W. F. Cook	Fillmore	Dr. Will R. Manning
San Mateo County—		Oxnard	Dr. G. A. Broughton
Dr. F. Holmes Smith	San Bruno	Ventura	J. H. Hardey
Burlingame	Dr. Jane H. Parkhurst	Santa Paula	Dr. G. C. Nichols
Daly City	Dr. A. H. Rankin	Yolo County—	
Hillsborough	C. M. Hirschey	Dr. W. J. Blevins	Woodland
Redwood City	Dr. J. L. Ross	Davis	Dr. W. E. Bates
San Bruno	Dr. F. Holmes Smith	Winters	Dr. R. E. Peck
San Mateo	W. C. McLean	Woodland	A. Silberstein
So. San Francisco	Dr. J. C. McGovern	Yuba County—	
Santa Barbara County—		Dr. J. H. Barr	Marysville
Dr. G. S. Lovern	Santa Barbara	Marysville	Dr. A. L. Miller
Lompoc	Dr. C. B. Constable	Wheatland	W. H. Niemeyer
Santa Barbara	Dr. C. S. Stevens		
Santa Maria	Dr. O. P. Paulding		

List of Diseases Reportable by Law

Anthrax	Ophthalmia Neonatorum
Beri-beri	Paratyphoid Fever
Cerebrospinal Meningitis (Epidemic)	Pellagra
Chickenpox	Plague
Cholera, Asiatic	Pneumonia (Lobar)
Dengue	Poliomyelitis
Diphtheria	Rabies
Dysentery	Rocky Mountain Spotted (or Tick) Fever
Erysipelas	Scarlet Fever
German Measles	Smallpox
Glanders	*Syphilis
*Gonococcus Infection	Tetanus
Hookworm	Trachoma
Leprosy	Tuberculosis
Malaria	Typhoid Fever
Measles	Typhus Fever
Mumps	Whooping-cough
	Yellow Fever

*Reported by office number. Name and address not required.

Quarantinable Diseases

Cerebrospinal Meningitis (Epidemic)	Poliomyelitis
Cholera, Asiatic	Scarlet Fever
Diphtheria	Smallpox
Leprosy	Typhus Fever
Plague	Yellow Fever

Section 16, Public Health Act. All physicians, nurses, clergymen, attendants, owners, proprietors, managers, employees, and persons living in or visiting any sick person in any hotel, lodging house, house, building, office, structure, or other place where any person shall be ill of any infectious, contagious, or communicable disease, shall promptly report such fact to the county, city and county, city, or other local health board or health officer, together with the name of the person, if known, and place where such person is confined, and nature of the disease, if known.



One of a series of cartoons, by A. V. Buel of The Sacramento Bee, for a tuberculosis exhibit at Camp Kearny, arranged by the Bureau of Tuberculosis of the California State Board of Health.